Introduction

In recent years there has been a growing trend for Councils to work together in order to improve efficiency and meet ever increasing financial savings targets. As one of the largest areas of spend, this applies particularly to household recycling and waste services. There is also growing pressure for greater simplicity and consistency in the way waste collection services are provided. Last September WRAP published its long awaited 'Waste Collection Consistency Framework for English Councils', recommending three collection options:

- a multi-stream recycling collection, with paper, glass and card and plastics, metals and cartons collected in three separate containers;
- a two-stream option, which includes collection of plastics, metals, cartons and glass in one container and a separate container for paper and card; and
- a fully commingled service including plastics, metals, cartons, glass and card.

The core set of recyclable materials recommended for collection includes plastic bottles and pots, tubs and trays, metal cans, aerosol containers and foil, glass bottles and jars, paper, card, drinks cartons and food waste.

West Kent Joint Waste Partnership

With existing collection contracts in Dartford, Tonbridge & Malling and Tunbridge Wells all now terminating in 2019 there is an opportunity for the three borough councils and Kent County Council to consider how they might best deliver their recycling and waste services In the future. Not included in this paper, but the three borough councils are also considering joint procurement arrangements for street cleansing.

Table 1: Authorities, Waste Collection Contractors and Contract End Dates:

Council	Contract End Data	
Council	Contractor	Contract End Date
Dartford Borough Council	Amey LG	30/06/2019
Tonbridge and Malling Borough Council	Veolia Environmental Services	28/02/2019
Tunbridge Wells Borough Council	BIFFA Environmental	30/03/2019

This briefing paper details:

- Current Recycling and Waste Service Cost and Performance;
- Draft Recycling and Waste Service Proposal;
- Changes in Household Containers;
- Draft Recycling and Waste Service Cost and Performance;
- Investment Costs;
- Partnership and Procurement Timeline and
- Next Steps

Current Waste Service Cost and Performance

Summary facts across the combined authority areas (2015/16 data):

- Service provided to c. 144,500 households;
- Collecting 133,000 tonnes of household recycling and waste p.a.;
- Gross collection costs of £6.6m, netting down to £5.2m p.a. after income;
- A processing and disposal costs of £12.6m p.a.;
- Combined cost for collection and disposal of £17.8m p.a.;
- Average recycling performance of 38.3% (ranging from 24.3% in Dartford to 45% in Tunbridge Wells); and
- Average cost per household £123.36.

Table 2: Current Collection frequencies, containers and performance:

Current Collection Methodologies			
Service	Dartford	TMBC	Tunbridge Wells
Residual	Weekly Green Wheeled 240l Bin/Black	Fortnightly Black Wheeled 240l Bin/Black	Fortnightly Green Wheeled 240l Bin/Black
	Sacks	Sack	Sacks
Recycling Wheeled Bin	Fortnightly Grey Bin -		Fortnightly Green Box - Paper and Card
	Paper/Card/Cans/Plastic Bottles		
Recycling Box	Fortnightly Black Box - Glass	Fortnightly Green Box - Paper and Cans	Fortnightly Green Box - Plastic and Cans
Garden Waste/Food Waste	Fortnightly Brown Bins Charged GW £38p.a.	Fortnightly Green lidded Bin -	Fortnightly Brown Bin/Hessian Sack -
	+ £40 bin	GW/FW/Cardboard	GW/FW
Recycling Performance	24.3%	40.0%	45.0%

Note: DBC Food Waste included in residual.

Table 3: Current Waste Service Cost and Performance:

Table 3: Current Waste Service Cost and Performance:	
Current Costs, Tonnage and Performance	
Description:	Sub Total
No of Households	144,481
Baseline Gross Collection Cost with adjustments	£6,622,827
Baseline Collection Income (incl. Recycling Credits)	-£1,452,193
Net Baseline Collection Cost	£5,170,634
Net Collection Cost per Household	£35.79
Waste Disposal Cost (incl. Recycling Credits)	£12,653,214
Net Baseline Collection and Disposal	£17,823,848
Net Collection and Disposal Cost per Household	£123.36
Tonnage of Household Waste	132,692
Performance:	
% Dry Recycling	17.4%
Composting (%)	21.0%
% Recycled/Composted	38.3%
Residual household waste per household (kg)	523
Total Household waste per household (kg)	930

Note Re Table 3: Recycling Credits are shown in both WCA income and WDA disposal costs.

West Kent Joint Waste Project Briefing Paper [produced by Waste consulting Ltd for WKJWP]

With disposal amounting to over 70% of the total cost of waste management, the three districts have been working closely with KCC, the KRP and its consultants WCL to identify the most cost effective waste management solution (based on cost & performance) across collection and disposal services for the Kent taxpayer. This has also taken into account lessons learnt from the East Kent & Mid Kent Partnerships.

Draft Recycling and Waste Service Proposals

After much discussion amongst Officers and with external waste consultancy support the most effective solution, the Nominal Optimal Model (NOM) identified is recommended as follows:

- Weekly Food Waste Collection;
- Fortnightly Collection of Residual Waste collection;
- Alternate Fortnightly Collection of Mixed Dry Recyclate (plastics, metals, cartons and glass) in a wheeled bin and a separate container for paper and card; and

This approach conforms to Option 2 of the WRAP Consistency Framework and mirrors the current arrangements in East Kent and, with the exception of segregating the paper/card from other recycling, to Mid Kent.

• In addition, the separate fortnightly collection of garden waste (as an "opt in" charged service).

It is important to highlight that not all households will be suitable to receive this service model and where necessary *weekly* residual waste collections will continue.

Residual waste composition analysis undertaken in the three districts highlights that a significant volume of food waste and target recyclates are not currently being collected for recycling.

This option has been selected on the grounds that:

- provision of a *weekly* food waste service is recommended to build public participation and set out of food waste;
- the segregation of paper enables the partnership to recover value from the largest recyclate stream and protect its quality from possible glass contamination;
- comingling the remaining recyclate is simpler for the public and encourages greater participation;
- charging for garden waste frees up council resources and expenditure from a nonstatutory service to provide better waste services for all householders and/or finance other council spending priority areas. The decision to introduce a charge is one for each individual Council to make.

Note re: Garden Waste Charging: The introduction of charged garden waste is a consistent theme across many Councils; with surveys quoting 42% of councils operating subscription services. Tonbridge & Malling and Tunbridge Wells jointly spend nearly £1.2m p.a. on existing comingled garden/ food/ cardboard collections. The modelling assumes a low garden waste charge of £30 p.a. and participation drop off rates between 50% and 60%. Surveys indicate the average charge to be £41.34 and drop off rates of 15% to 30% from free to charged service provision.

Changes in Household Containers

Table 2 above clearly demonstrates the variety in materials collected and containers used currently. However, these can be re-used in a consistent manner to minimise additional costs and get the most out of Councils' existing container investment. The new service proposals utilise existing bins and boxes wherever possible. New internal and external food waste caddies will however have to be provided to all participating households. Existing residual wheeled bins will be retained and used for residual waste collection, existing recycling boxes will be used for paper/cardboard containment and existing garden waste bins in Tunbridge Wells and Tonbridge & Malling will be rebranded for use as mixed dry recycling wheeled bins. Subscribers to a new charged garden waste service will be supplied with a new garden waste wheeled bin and costs recovered within the new garden waste service charges.

Draft Waste Service Cost and Performance

The modelling that has been undertaken can only provide a guide on the likely extent of participation in the new service. Annex A and Annex B provide a low and medium view of forecast service cost and performance and some of the assumptions associated with each view. The table below details expected costs, savings and recycling performance.

Table 4 Overall Collection and Disposal Savings and Performance

Description	Low	Medium
Existing Waste Service Cost	£17,823,848	£17,823,848
New Waste Service Cost	£14,875,181	£13,480,019
Overall Collection and Disposal Savings	£2,948,666	£4,343,829
Average Recycling Performance	41.7%	49.7%

The savings are broadly derived $1/3^{rd}$ from collection and $2/3^{rds}$ processing and disposal, the former includes £1m to £1.25m income from garden waste charging and the latter £1m to £1.25m benefit derived from segregating paper and card. This reflects the potential for variation in garden waste take up and paper and card values.

Whilst the medium view virtually delivers England's 2020, 50% Recycling Target the Low View falls c. 8 percentage points short. It is worth noting that the same collection methodology can deliver substantially in excess of 50% but performance is mixed. On-going communications support and robust policies and procedures to address side waste, contamination and poor participation are required to deliver sustained, good performance.

Investment Costs

In order to facilitate the change in service:

 The existing collection fleet will need to be replaced. This is to be funded by the new contractor and has been accounted for in the modelled costing above and at Annex A and B;

- Households will require new internal/external food waste caddies estimated at a cost of £800k. This upfront capital cost has not been included in the above modelling; and
- a new food waste transfer facility will be needed for the Tunbridge Wells collection fleet, estimated as a cost of £500k. This is a separate and additional cost required to deliver disposal cost savings.

The combined £1.3m funding related to the containers and transfer facility requirement could be directly funded by the Councils from the anticipated savings or included within the new contract requirement. KCC has identified serious capital funding constraints which need to be taken into consideration by all partners.

Assuming these investment costs are written down over 10 years and a capital charge of 3%, is applied then future savings would be reduced by c£150k p.a. to fund the investment. This would reduce the model savings detailed above to c. £2.8m and £4.2m respectively.

Partnership and Procurement Timeline

To derive Best Value from joint working and get service providers input into the most cost effective collection/processing methods it is proposed that the partners commence an Open Tender, with pre-procurement contractor engagement process [note: procurement process advice updated by WKWPG in June 2017] This is anticipated to require approximately 9 months in addition to a minimum 6 month mobilisation period necessary for the supply of a new recycling and refuse collection fleet. With Tonbridge & Malling's existing contract terminating 28th February 2019 publication of an OJEU Procurement Notice would be required by late 2017. In advance of that the partners need to conclude an Inter Authority Agreement detailing partnership principles, funding arrangements, benefit disaggregation and joint working arrangements. This work is being coordinated by the West Kent Waste Partners Group (WKWPG).

Next Steps

Given the potential savings opportunity and improvements in service performance outlined Council Officers and Members are asked to agree to the project progressing to the next stage. This will see the development of the Inter Authority Agreement which will be brought back for Member agreement in late 2017 prior to commencing a procurement process. There are key areas remaining for discussion not least issues regarding the timetable, agreement of baseline view, savings disaggregation and performance incentivisation, treatment of existing recycling credits, source and payback of investments funding, approach to procurement.

Annex A: Savings and Recycling Performance – Low View

The low view table below assumes:

- 7% of Household Waste Stream is captured Food waste;
- Average Dry Recycling performance is 23.7%;
- Only 40% of existing Garden waste customers take up new service;
- Only 50% of GW captured; and
- GW charge of £30 per bin generates new Income from Garden Waste Services £1m.

Model New Service Costs, Tonnage and Performance		
Description:	Sub Total	
No of Households	144,481	
New Gross Collection Cost with adjustments	£6,538,192	
New Collection Income (incl. Recycling Credits)	-£2,425,336	
New Net Collection Cost	£4,112,856	
Net Collection Cost per Household	£28.47	
Waste Disposal Cost (incl. Recycling Credits)	£10,762,325	
Net New Collection and Disposal	£14,875,181	
Diff to Baseline	-£2,948,666	
Net Collection and Disposal Cost per Household	£102.96	
Tonnage of Household Waste	129,730	
Performance:		
% Dry Recycling	23.7%	
Composting (%)	18.0%	
% Recycled/Composted	41.7%	
Change in Recycling/Compost %	3.4%	
Residual household waste per household (kg)	479	
Total Household waste per household (kg)	898	

Note Re above Table: Recycling Credits are shown in both WCA income and WDA disposal costs.

Annex B: Savings and Recycling Performance – Medium View:

- 10% of Household Waste Stream is captured Food waste;
- Average Dry Recycling performance is 28.6%;
- 50% of existing Garden waste customers take up new service;
- 60% of Garden Waste captured; and
- New Income from Garden Waste Services £1.34m.

Model New Service Costs, Tonnage and Performance	
Description:	Sub Total
No of Households	144,481
New Gross Collection Cost with adjustments	£6,538,192
New Collection Income (incl. Recycling Credits)	-£2,693,782
New Net Collection Cost	£3,844,410
Net Collection Cost per Household	£26.61
Waste Disposal Cost (incl. Recycling Credits)	£9,635,609
Net New Collection and Disposal	£13,480,019
Diff to Baseline	-£4,343,829
Net Collection and Disposal Cost per Household	£93.30
Tonnage of Household Waste	129,389
Performance:	
% Dry Recycling	28.6%
Composting (%)	21.1%
% Recycled/Composted	49.7%
Change in Recycling/Compost %	11.4%
Residual household waste per household (kg)	405
Total Household waste per household (kg)	896

Note Re above Table: Recycling Credits are shown in both WCA income and WDA disposal costs.