



Cumbria Strategic Waste Partnership

Enhanced Partnership Working Stage Two: Final Report

November 2011

EXECUTIVE SUMMARY

In 2003 the Landfill Allowance Trading scheme waste introduced as the UK's mechanism for meeting its obligations under the Landfill Directive 1999. LATS placed waste diversions targets on Waste Disposal Authorities for which non-achievement would lead to financial penalties.

The Cumbria Strategic Waste Partnership was set up as a response to the challenges of LATS and its aim is to deliver projects that would minimise waste and increase recycling and composting and diversion from landfill.

LATS obligations end in 2012/13 as a result of a government review, however the Comprehensive Spending Review 2010 has placed significantly greater pressures on local authority budgets. This is resulting in local authorities across the Country having to redesign services to meet the constraints. Like all the public sector Cumbria County Council has significant budget pressures and as such is considering revising the basis on which the payment of Recycling Rewards is made to each of the District Councils. One option under consideration would see all future Recycling Reward payments calculated using the statutory minimum allowances which would see overall payments reduce from the current level of £6m per annum to £5m per annum).

In response to budgetary pressures in all authorities the Cumbria Strategic Waste Partnership (CSWP) is keen to develop and implement new ways of working together so as to deliver more cost effective waste management services.

In order to achieve this aim the CSWP Board set up the Enhanced Partnership Working Project and appointed Kinetic Consultancy Solutions (KCS) to work with them to test a range of projects that have the potential to deliver financial benefits through closer working.

The three stages of the Enhanced Partnership Programme (EPW) are as follows:

Stage 1: Establishing the overall project including scoping, governance and reporting requirements;

Stage 2: Developing the individual projects to be assessed against agreed criteria;

Stage 3: Implementing those projects able to demonstrate potential financial benefits arising from joint or closer working between CSWP member authorities.

In total, the EPW programme has the potential to realise between £5.73m and £8.18m of savings if member authorities agree to prioritise and implement a number of key projects listed below. This saving is against the total cost of waste management in Cumbria of £44,930,667 in 2010/11, (£16,014,710 borne by the six district authorities and £28,915,957 borne by the County Council). Appendix 1 contains more information on the cost of waste services across the partnership authorities.

Key Projects

- The joint marketing and sale of materials from those member authorities able to 'pool' recyclates;
- Developing plans to maximise the potential of the forecast spare capacity available at the two MBT plants currently under construction by Shanks Waste Management;
- Integration of collection methodologies to ensure that maximum efficiencies are generated from implementing 'cross boundary' collection routes, developing common commingled collection systems in order to rationalise the number of crews required to collect residual, recycling and green waste across the County, and managing services under a single, uniform management structure;
- Diverting residual waste presented at Household Waste Recycling Centres (HWRCs) that is currently sent to landfill for disposal.

A further group of projects do offer some future potential for reducing the cost of delivering waste management services, these have been evaluated but are either dependent on the delivery of projects outlined above, or require further detailed work to fully determine the extent of potential savings. These include:-

- The joint procurement of goods, materials and consumables across all the waste collection authorities;
- The development of 'integrated' management systems for data management and customer care;

Two final projects are not yet at a stage to be evaluated. These are:-

- The impact of HWRC closures on waste collection authorities; and
- Alternative governance arrangements.

In both cases, the project will be considered by the CSWP at some future point, as yet undefined, because further information is needed to complete the relevant evaluations.

The savings from each of the projects are summarised in table 1.1 below:-

Table 1.1 Summary of Anticipated Financial Savings

Project Element	Title	Estimated Savings £m	Estimated Savings £m	Year Benefit First Falls	Implementation Costs	Key Issues
		Low	High			
PE7&8	Alternative collection methodologies	3.30*	4.40*	2015/16	Procurement budget plus officer time = 3% of contract value	For full savings to be realised model assumes all WCAs 'join' integrated contract at earliest opportunity
		0.25**	0.25**	2013/14		Savings arise from integration into a single, uniform client

Project Element	Title	Estimated Savings £m	Estimated Savings £m	Year Benefit First Falls	Implementation Costs	Key Issues
PE3	Maximising income from the sale of recycle	***0.75	***1.20	2013/14 & 2014/15	Low value procurement budget	function Successful implementation dependent on securing suitable, strategic transfer facilities. Cumbria County Council is well placed to facilitate this outcome.
PE1	Maximising the benefits of spare capacity at MBT	0.40	1.30	2013/14	Officer time to broker and negotiate third party agreements	Discussions need to focus on arrangements for securing access to spare capacity from Shanks Waste Management and how the benefits are shared between member authorities
PE1a	Maximising the benefits of spare capacity at MBT facilities	****0.50	****0.50	2013/14	Office time to negotiate	This element relates to the treatment of HWRC waste, currently being landfilled, being diverted to the MBT facilities for reprocessing
PE2	Opportunities for trade waste	0.50	0.50	2013/14	Officer time to implement trade waste solutions at relevant HWRC sites.	
PE4	Joint procurement of consumables	0.03	0.03	2012/13	Lead authority officer time to establish pooled purchasing agreement	Requires all participating authorities to align consumables profile
PE5	Data management	Limited		If and when services are integrated		Dependent on progress against PE8
PE6	Customer contact	Limited		If and when services are integrated		Dependent on progress against PE8
PE9	Impact of HWRC closures on WCAs	Not currently known				Further work underway by Cumbria County Council
PE10	Governance	Not currently known				To be reviewed if EPW moves to Stage 3
	TOTAL	5.73	8.18			

* Subject to any MRF processing costs and any cost of container configuration

** These savings relate to savings through a single management team for waste collection services.

*** The model assumes that savings will be accrued only to those authorities able to pool recycles:

Allerdale BC, City of Carlisle, Copeland BC and South Lakeland DC.

**** The forecast savings can only accrue to Cumbria County Council because the waste is under contract within the terms of the agreement with Shanks Waste Management. This is the maximum and will need to be negotiated with Shanks Waste Management and Cumbria Waste Management.

As part of the evaluation of Project Element 8 Alternative Collection Methodologies a number of additional service configurations were identified for modelling. This will allow for a direct comparison

between five different waste management service profiles and their respective level of financial savings. The early completion of this work is important as Project Element 8 holds the key to delivering the greatest value of financial savings.

A programme of implementation (Stage 3 of the EPW programme) can begin in early 2012 with a view to realising the first tranche of savings in 2012/13 subject to agreement on key issues covering new governance arrangements, mechanisms to share any benefits realised, and the willingness of member authorities to sanction the commencement of projects that they may not be directly affected by at their outset.

In order to successfully deliver the EPW programme resources will need to be allocated by Lead Authorities, or 'pooled' and managed through different governance arrangements to effect the implementation of a challenging but achievable suite of projects.

Although many of the projects are not dependent on member authorities formally working together the maximum value of savings will only be realised where the number of participating authorities is similarly maximised. This should not prevent smaller groups of authorities from working together but consideration should always be given to extending the 'membership' of any project group to all member authorities to ensure that maximum value is derived at the point of implementation.

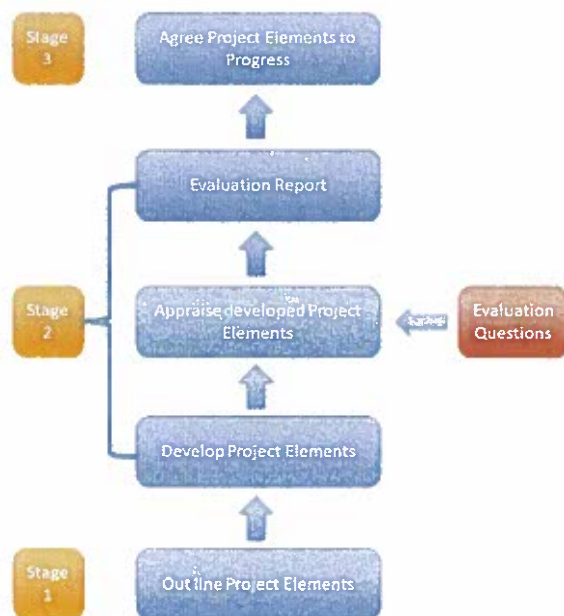
Part One: Background & Introduction

The history of the Cumbria Strategic Waste Partnership and the origins of the Enhanced Partnership Working (EPW) project is contained in Appendix 2. This section outlines the 3 stages of the EPW Project and the work that has been carried out completing stage 1 and 2.

Stages of the Enhanced Partnership Working Project

The EPW Project has been split into three stages as shown and detailed below:-

Diagram 1 – Stages of the Enhanced Partnership Working Project.



Stage 1: Project Scoping (March - June 2011)

During this period KCS worked with officers from each of the authorities to:-

- Develop a vision statement for the overall project;
- Identify a range of projects (known as Project Elements) to be considered at Stage 2
- Agree a number of evaluation criteria to be used to assess the relative benefits of each Project Element.

On 22nd June 2011 the CSWP Board agreed the following products from stage 1

1. An Overarching Vision Statement

"Working in partnership with our communities we will provide the residents of Cumbria with reliable, environmentally friendly services that delivers value for money"

2. The Project Elements

- Element 1 - Maximising the benefits of spare capacity at MBT facilities.
- Element 2 – Opportunities for trade waste.
- Element 3 - Maximising income from the sale of recyclables.
- Element 4 - Joint procurement of consumables.
- Element 5 - Data management.
- Element 6 – Customer care.
- Element 7 - Applying the proximity principal to the collection of waste.
- Element 8 – Alternative collection methodologies.
- Element 9 – Impact of HWRC closures on WCA.
- Element 10 - Alternative governance structures.

3. The evaluation criteria to be used to appraise each Project Element

High level criteria	Sub-level criteria
A – Finance	A1 – Savings
	A2 – Impact on Recycling Rewards
B - Quality	B1 – Service Level
	B2 – WRAP Waste Collection Commitment
	B3 – Health & Safety
C - Environment	C1 – Carbon
D - Deliverability	D1 – Contractual
	D2 – Political
	D3 – Interdependency on other projects
	D4 - Governance

Stage 2: Development of the Project Elements and their Appraisal

This report sets out the conclusions of Stage 2 of the Enhanced Partnership Working (EPW) Programme approved by the Cumbria Strategic Waste Partnership (CSWP) during the summer of 2011. The purpose of the EPW Programme has been to evidence the benefits, as measured by a number of key factors and formally adopted as evaluation criteria, of all members of the CSWP working together across a range of waste-related projects.

Each Project Element has initially been treated as a stand-alone project, however, as part of the initial scoping work it has been clear that a small number of projects have a direct link to the deliverability of other projects. These include:-

PE2: Opportunities for Trade Waste, where the outcome of PE2 will make a significant contribution to the outcomes of PE1: Maximising the Benefits of Space Capacity at MBT Facilities because it provides a mechanism for securing the treatment of non-contract waste at a rate less than currently been applied to its disposal via landfill;

PE7: Applying the Proximity Principle, provides the means for implementing efficiencies identified as part of PE8: Alternative Collection Methodologies, whereby more efficient collection rounds can be established where crews are deployed from the nearest depot irrespective of administrative boundaries.

Furthermore, the initial scoping identified that some Project Elements are likely to make a more significant impact, particularly in terms of identifying potential financial savings. For this reason each Project Element was assigned to one of three 'groupings' with:-

- Group 1 being those Project Elements where the magnitude of financial savings was considered to be significant;
- Group 2 being those Project Elements unlikely to deliver any significant savings;
- Group 3 being those Project Elements where a separate evaluation was not possible at this stage of the EPW programme.

Each Project Element has been assigned to either Group 1, 2 or 3 as follows:-

Group 1

PE3: Maximising Income from the Sale of Recyclates;

PE1: Maximising the Benefits of Spare Capacity at MBT Facilities;

PE2: Opportunities for Trade Waste;

PE8: Alternative Collection Methodologies;

PE7: Applying the Proximity Principle for the Collection of Waste.

Group 2

PE4: Joint Procurement of Consumables;

PE5: Data Management;

PE6: Customer Contact;

Group 3

PE9: Impact of HWRC closures on WCAs;

PE10: Alternative Governance Arrangements;

Evaluation of the Project Elements

At the outset of Stage 2 of the EPW Programme it was the intention to undertake a full evaluation of each Project Element. The Enhanced Partnership Working Delivery Team (Officer) evaluated all of the Project Elements against the evaluation criteria contained in Appendix 3 and summarised in Table 1.2 below on the 30th September. This exercise identified that the scale of benefits may vary considerably and this is the reason that each of the Project Elements were grouped as described above. It was agreed that all Group 1 projects were to be evaluated by members of the CSWP, and that the Enhanced Partnership Project Delivery Team (officer group) evaluation for Group 2 projects would be used. The Cumbria Strategic Waste Partnership evaluated all Group 1 projects on the 12th October 2011

Appendix 3 contains the complete evaluation criteria used to assess each Project Element. Table 1.2 provides a summary of the strongly positive and strongly negative characteristics for each of the eleven evaluation criteria.

Table 1.2 Evaluation Criteria

Evaluation Criteria	Description
Value of Savings	Likely annual or one-off sum
Impact on Recycling Rewards	Strongly Positive - savings available in 2012/13 to offset a reduction in Recycling Rewards payments and does not require share mechanism to be negotiated Strongly Negative – increases the reliance on Recycling Rewards payments
Service Level	Strongly Positive – significantly improving the quality and / or range of materials being collected Strongly Negative – represents a reduction in terms of the quality and / or range of materials being collected
Customer Satisfaction	Either a positive or negative impact on customer satisfaction
WRAP Collection Commitment	Strongly Positive - impacts positively on five or more of the WRAP collection commitments listed below Strongly Negative – impacts negatively on five or more of the WRAP collection commitment as listed below: <ul style="list-style-type: none"> • Clear explanation of services received • Regularity of collections • Reliability of collections • Taking into account special request by individual authorities • Doesn't produce litter • Collecting as many materials as possible and explaining what happens to them • Explaining service rules and reasons for them

Evaluation Criteria	Description
	<ul style="list-style-type: none"> • Responding to complaints • Communicating the Waste Collection Commitment
H&S	<p>Strongly Positive - eliminates the likelihood of a breach of H&S legislation</p> <p>Strongly Negative - significantly increases the likelihood of a breach of H&S legislation</p>
Carbon	<p>Strongly Positive – significant reduction in quantity of carbon produced through the delivery of service</p> <p>Strongly Negative – significantly increase the amount of carbon being produced</p>
Contract	<p>Strongly Positive – no impact on existing contracts and can be delivered within 6 months</p> <p>Strongly Negative – very difficult to deliver as it will require significant contract negotiations with two or more districts or one district and disposal contract, leading to significant cost and time implications</p>
Political	<p>Strongly Positive – strong support from all leading political groups. No executive agreement needed prior to implementation</p> <p>Strongly Negative – likely to attract strong opposition from 2 or more authorities with no amount of communication and discussion likely to overturn those positions. Cannot be delivered unless all authorities on board</p>
Inter-dependency	<p>Strongly Positive – is independent from any other Project Element</p> <p>Strongly Negative – cannot be delivered as it is dependent on too many other projects and additional work will not improve deliverability</p>
Governance	<p>Strongly Positive – No change in existing delivery and governance structure and can be delivered immediately</p> <p>Strongly Negative – Requires significant changes in delivery and governance structure which will not be agreed by all relevant authorities</p>

Anticipated Financial Savings

Each of the Project Elements has been scoped with a view to demonstrating how they can contribute towards Enhanced Partnership working. However, in the light of the current financial situation the member authorities agreed that projects likely to move forward to implementation must be able to demonstrate how they contribute towards the challenging efficiency agenda now facing all local authorities.

The analysis of the relative financial impact of each Project Element has drawn heavily on cost and performance data provided by each member authority at the beginning of Stage 2 of the EPW Programme. If member authorities wish to proceed with any project or group of projects a further detailed financial assessment, evidenced against primary sources of data, will need to be carried out as part of any approval process or business case submission.

Part Two: Project Elements

PE3 Maximising Income from the Sale of Recyclates

Key Points

- Only relevant for those authorities in the short term whose recyclates are not linked into collection contracts (Allerdale BC, Carlisle CC, Copeland BC and South Lakeland DC).
- Reliant on a network of Waste Transfer Stations being made available for the storage and transfer of pooled materials.

Scope

Currently, across Cumbria the six waste collection authorities and the waste disposal authorities are managing the sale of recyclables on a stand-alone basis. The aim of the Project Element is to test the potential financial benefits of authorities working together to pool the overall volumes of recyclates and to then test the market in order to benefit from economies of scale.

Findings

The value of recyclates is governed by four major factors:-

- **Quality** – lower levels of contamination and the greater degree of separation that takes place i.e. separation of paper from card increases the value of materials. Currently there is 'mixed provision' of kerbside sort and commingled collection of dry recyclables with each of the six waste collection authorities offering a slightly different service configuration and no one system favoured as the most suitable form of collection across the County;
- **Quantity** – the greater tonnage the greater the ability to secure a higher price from the market, based on economies of scale. Each member authority currently markets its recyclables separately;
- **Location** – There will always be a cost of transferring recyclables for a reprocessor. These costs can be reduced if the haulier is able to offset costs with return loads. This is more likely to happen if the haulier is supporting a wider network of collection locations. Conversely, minimising the number of locations at which materials are bulked for transfer can also reduce transportation costs of the haulier;
- **Security** – The price paid for materials will depend on the acceptance of price risk due to market volatility. A long or medium term contract at a fixed price will provide security in the long term but is unlikely to deliver the best price in the short term.

Within Cumbria the waste collection authorities have, to date, been utilising a network of third party transfer stations to support the bulking of recyclates. The County Council contract with Shanks Waste Management provides a new opportunity in 2012/13 and 2013/14 to exploit new strategic

transfer and treatment points that will be available for residual waste but also may be suitable for the storage and bulking of recyclates. These strategic points are:-

- Northern and Southern Resource Parks;
- Cumbria Waste Management waste transfer stations, Lillyhall Industrial Estate, Workington and Flusco Transfer Station; and
- Sita waste transfer station, Kendal Fell.

This Project Element has assumed that the strategic transfer points outlined above are used by the waste collection authorities to bulk up recyclables but there may be other facilities that could be used across the County.

Only four member authorities will be able to make recyclates available in the short term because the two remaining member authorities (Barrow BC and Eden DC) have recently included the sale of recyclates in the specification of collection services in order to reduce the overall net cost of collection to the relevant authority.

Table 3.1 provides details of which materials will be available for pooling in a joint marketing of recyclates in which years during the period 2012/13 to 2017/18 inclusive.

Table 3.1 Availability of recyclates by material by year

	Paper	Card	paper/card	Plastics	Cans	Glass	Comingled*
2012/13	5514	1559	5366	1313	997	4076	1893
2013/14	5514	1559	5366	1313	997	4076	1893
2014/15	7802	2460	5599	2124	1273	6536	1893
2015/16	12042	2460	7132	2339	2051	10053	1893
2016/17	12042	2460	7132	2339	2051	10053	1893
2017/18	13313	2460	7132	2339	2051	10053	6534

* Commingled excludes paper

Using forecast tonnages a three-year financial analysis has been completed comparing the potential income from pooled recyclates based on the best market rate available. The results are set out in Table 3.2 and show two scenarios - with and without the cost of storage taken into account. The cost for storage at the strategic waste transfer stations has been assumed as £8/t.

Table 3.2 Comparison of current versus 'market' price income from pooled recyclates

All Materials	2012/13	2013/14	2014/15
Total Potential income (including storage costs)	£1,537,696	£1,537,696	£2,101,100
Total Current income	£897,380	£897,380	£1,118,901
Total additional income	£640,316	£640,316	£982,199
Total potential income (without storage costs)	£1,655,684	£1,655,684	£2,260,261
Total Current income	£897,380	£897,380	£1,118,901
Total additional income	£758,303	£758,303	£1,141,360

An additional analysis has been undertaken in order to show where the respective financial benefits will accrue, based on forecast tonnages provided by each of the member authorities able to participate in the joint marketing of recyclates. The results of this analysis are included below in Table 3.3.

Table 3.3 Financial benefits of joint marketing of recyclates by member authority

Allerdale	2012/13	2013/14	2014/15
Tonnage Available	5629	5629	5629
Current total income	£391,740	£391,740	£391,740
Possible total income	£577,298	£577,298	£577,298
Difference	£185,558	£185,558	£185,558

Carlisle	2012/13	2013/14	2014/15
Tonnage Available	2225	2225	3748
Current total income	£174,310	£174,310	£233,060
Possible total income	£260,570	£260,570	£437,018
Difference	£86,260	£86,260	£203,958

Copeland	2012/13	2013/14	2014/15
Tonnage Available	2219	2219	3835
Current total income	£199,764	£199,764	£339,482
Possible total income	£274,091	£274,091	£465,004
Difference	£74,327	£74,327	£125,522

South Lakeland	2012/13	2013/14	2014/15
Tonnage Available	4675	4675	6683
Current total income	£131,567	£131,567	£154,620
Possible total income	£543,725	£543,725	£688,581
Difference	£412,158	£412,158	£533,961

A breakdown of the tonnage available by material for each authority is contained in Appendix 4. Although the financial benefits of joint marketing of recyclates can be easily apportioned based on tonnage it is also necessary to factor in potential additional costs incurred by member authorities

due to additional transportation of materials to the proposed North and South Resource Parks plus the CWM waste transfer station at Workington and the Sita waste transfer station at Kendal Fell.

The financial models used in the Project Element have assumed that the strategic waste transfer stations are made available at the North and South Resource Parks, provided by Shanks Waste Management under contract to Cumbria County Council. However, the County Council, in its role as waste disposal authority will need to be invited to enter into relevant contract negotiations with Shanks Waste Management in order to ensure the availability of these facilities for the storage and bulking of the pooled recyclates.

Evaluation

Evaluation Criteria	Result
Level of Savings	Additional income in the region on £0.7m could be realised in the short term, depending on the markets and tonnage collected, to over £1m subject to level of market risk the authorities are willing to take. The markets are currently high and as such revenue is high.
Impact on Recycling Rewards	There was general recognition that the Project Element would deliver savings to off set Recycling Rewards in 2012/13 onwards subject to a share mechanism being agreed by relevant participating authorities. However, concern was also raised that this would not be as significant as forecast because of the risk of market volatility and the complexity of enabling a network of transfer stations to provide relevant bulking facilities. Concern was raised that two of the authorities most affected by revisions to the payment of Recycling Rewards would not benefit from this Project Element as their recyclables tonnages are tied into their existing collection contracts.
Service Level:	The Project Element will deliver no positive change in service levels delivered by participating authorities if additional materials could be collected in the future subject to stable market conditions.
Customer Satisfaction	The Project Element will improve customer satisfaction if arrangements are put in place that allow for the collection of additional materials.
WRAP Collection Commitment	The Project Element will have a positive impact on up to 2 of the WRAP Collection Commitments where the implementation of the project allows for additional materials to be collected.
Health & Safety	The Project Element is unlikely to increase or decrease the likelihood of a breach of H&S legislation by the member authorities.

Carbon	The Project Element will give a slight reduction in the level of carbon produced through the delivery of services by member authorities because 'pooled' storage is likely to reduce the overall number of vehicle movements.
Contract	The Project Element requires each relevant member authority to commit to contractually 'pooling' recyclates. Given the diversity in current arrangements implementation carries different degrees of difficulty or risk for each potential participating authority and therefore an agreed evaluation is not appropriate. The Project Element also requires Cumbria County Council to liaise with SWM and their sub contractors, CWM and Sita to use the network of transfer stations for the storage and bulking of pooled recyclables.
Political	All relevant authorities leading political groups see the advantages of the Project Element although further work / communication is required to fully cement support for its delivery.
Inter-dependency	The Project Element is independent from all other existing projects or proposed projects for 1 or 2 member authorities. For those authorities where there is interdependency only minor work is required to enable the Project Element to be delivered.
Governance	<p>There was no agreement with regards to the impact of the Project Element on governance arrangements. This was due in part to the decision to defer an assessment on <i>Project Element 10: Governance</i>, looking at alternative forms of legal entity used to deliver partnership working between waste collection authorities and waste disposal authorities.</p> <p>Although there was agreement that the Project Element would require some changes there was no consensus with regards to how complex those change would need to be and how those changes would need to be approved across participating member authorities.</p>

Next Steps

It is recommended that Project Element 3 be considered for inclusion in Stage 3 of the Enhanced Partnership Working programme.

In developing the detailed business case for the joint marketing of recyclates a number of issues need to be considered as follows:-

- A lead authority/ies should be appointed to oversee the project and its implementation;
- Early discussions will need to take place to confirm whether the network of waste transfer stations can be made available for the purpose of bulking and storing recyclates ahead of onward transportation to reprocessors;
- A risk analysis shall be completed in order to determine the degree of price risk each potential participating member authority considers appropriate;
- Develop a procurement plan based on testing the market for each material by individual lots and comparing this against a combined lot in order to attract the widest range of reprocessors;
- All authorities to commit to a long term arrangement;
- Agree a share mechanism for increased revenue; and
- Agree a procurement strategy to find a reprocessor for each material.

Key Points

Dependent on:-

- Level of waste prevention and recycling achieved by the district authorities;
- Successful contract discussions with Shanks Waste Management; and
- Share mechanism being developed between all parties.

Scope

The aim of the Project Element is to provide an analysis of the potential financial benefits that may accrue to member authorities by utilising any spare capacity available at the MBT facilities provided by Shanks Waste Management (SWM) through the waste treatment Contract held by Cumbria County Council. In particular the scope seeks to identify the wider financial benefits available from the waste disposal authority working directly with the waste collection authorities to deliver a better net financial contribution than compared to SWM 'importing' third party waste to optimise the MBT facilities.

Findings

The County Council contract with Shanks Waste Management (SWM) allows for the design, build and operation of two MBT facilities by April 2014. The total capacity of the two facilities has been designed to 'match' the volume of residual waste forecast allowing for waste growth and a 50% recycling rate for household waste by the end of the 25-year contract. Within the original model initial 'spare capacity' was forecast at approximately 18,500 tonnes in 2013/14 and reducing to zero by 2030/31. Under the County's contract with SWM, the County has direct control over how spare capacity is to be utilised. If the County were to work with SWM to fill this spare capacity, SWM will be entitled to share the additional revenue. Consequently it is more beneficial to the member authorities to work together to fill the spare capacity, with one direct opportunity relating to any trade waste, collected either by the waste collection authorities or presented through the County Council's network of HWRCs, being processed through the MBT facilities.

The average level of spare capacity over the lifetime of the contract was estimated to be 7,000 tonnes per annum based on the original waste growth forecasts used in the financial modelling. The value of the original space capacity has already been built into the annual contract price paid by Cumbria County Council.

As part of the initial project scoping an early opportunity has been identified to utilise a proportion of the spare capacity at the point of both facilities becoming operational by diverting HWRC waste currently being sent to landfill.

Even when a proportion of the spare capacity is used for processing HWRC waste, since the commencement of the contract in 2009 waste growth has been zero and the initial forecast levels of spare capacity has increased to 26,000 tonnes per annum with average spare capacity forecast to be in the region of 25,000 tonnes per year. An assessment of the value of spare capacity that may be realised by member authorities has been undertaken as follows:-

- The marginal value of each tonne of spare capacity equates to £50 (the difference between landfilling waste, £87t and putting the waste through MBT, £37t) realisable to the waste collection authorities minus any share arrangement with SWM;
- At 1% waste growth over the lifetime of the contract the average available spare capacity equates to 8,000 tonnes per year;
- At -1% waste growth over the lifetime of the contract the average spare capacity equates to 42,000 tonnes per year;
- The financial value of 8,000 tonnes of average spare capacity equates to £0.4m per annum based on member authorities retaining the whole benefit arising from the use of spare capacity;
- The financial value of 42,000 tonnes of average spare capacity equates to £2.1m per annum based on member authorities retaining the whole benefit arising from the use of spare capacity;
- The revised forecast average spare capacity is estimated to be 26,000 tonnes per annum, which equates to a financial value of £1.3m per annum based on member authorities retaining the whole benefit arising from the use of spare capacity.

The payment of Recycling Rewards is the main financial incentive used by the County to drive recycling performance and any reduction in the value of Recycling Rewards paid increases the risk of 50% recycling performance not being achieved, thus reducing the spare capacity at the MBT facilities or potentially, if services have to change significantly, removing it completely. The figures derived from our analysis are subjective to significant fluctuation based on the actual annual waste growth experienced within Cumbria and the levels of waste prevention achieved. The actual available amount of spare capacity has been forecast on the basis of the County and the District Councils achieving an average recycling rate of 50% and any underachievement will impact on the actual availability of spare capacity. If tonnage remains flat, i.e. no waste growth, and recycling performance is maintained at 43.9% then approximately 14,260 tonnes of spare capacity would be available (assuming all HWRC residual waste is directed to the MBT facilities as described above), this equates to a potential saving of £0.460m per annum.

Evaluation

Evaluation Criteria	Results
Level of Savings	Up to £1.0 million per year (assuming revised forecast waste flows) subject to variation in the level of waste growth actually realised and the recycling rate achieved by the waste collection authorities compared to the original forecasts allowed for in the contract with Shanks Waste Management.
Impact on Recycling Rewards	The Project Element will generate savings to off set Recycling Rewards from 2014/15. A share mechanism will need to be agreed between relevant District Councils and County Council to distribute the savings equitably.
Service Level	Although the prevailing view was that the Project Element will deliver no overall positive or negative change in service levels there was some discussion about the benefits of using spare capacity at the MBT facilities to treat waste that would otherwise be sent to landfill that would lend itself to a more positive score.
Customer Satisfaction	The Project Element likely to deliver an improvement in customer satisfaction because the project is making a positive contribution to reducing the overall cost of managing waste across the County.
WRAP Collection Commitment	The Project Element will have neither a positive or negative impact on the WRAP Collection Commitment.
Health & Safety	The Project Element is unlikely to increase or decrease the likelihood of a breach of H&S legislation by the member authorities.
Carbon	The Project Element will give a reduction in the level of carbon produced through the delivery of services as waste previously being sent to landfill will be processed through the Mechanical Biological Treatment facility.
Contract	The Project Element will be moderately difficult to deliver as it will require negotiations around the County Council disposal and treatment contract to ensure that the level of spare capacity is secured on terms that suit all parties to an agreement.
Political	The Project Element will be moderately difficult to deliver and further work / communications will be needed to fully engage some of the authorities leading parties.

Evaluation Criteria	Results
Inter-dependency	The Project Element is interdependent on other projects including potentially securing the availability of trade waste to feed the spare capacity of the MBT facilities although only minor changes or revisions will be required to enable the project to be delivered.
Governance	The Project Element will require minor changes by all the member authorities but those changes are unlikely to cause significant problems and can be changed swiftly without authorisation from outside the CSWP Project Board / EPW Delivery Team.

Next Steps

Project Element 1 is recommended for inclusion in Stage 3 of the EPW Programme based on the likely value of savings available. However, as part of the work of Stage 3 a number of material issues will need to be resolved including:-

- Development of relevant mechanism for sharing the financial benefits realised.
- Agreement on 'ownership' of spare capacity;
- Understanding the operational and financial relationships between being able to generate increased levels of 'spare capacity' through higher levels of recycling and waste prevention and the impact on service provision in a reduction in the value of Recycling Rewards paid.
- Identifying and securing 'at best possible rates' to meet any shortfall in tonnage needed to fully utilise the MBT spare capacity.
- Understanding the legal mechanism (and risks) in order that non-contract waste can be passed through the MBT facilities.

Key Points

- Only relevant for those authorities that still operate trade waste collection services (Allerdale BC and Copeland BC).
- One mechanism for filling spare capacity in MBT facilities (interlinked with PE 1)
- Potential for trade waste to be accepted at HWRCs but unlikely to generate any significant income and would require robust permit system to operate. Would be easier if weighbridge at sites.

Scope

The Project Element has been developed in order to identify opportunities going forward for the more effective management of trade waste. The Project Element has been scoped to cover two key issues:-

- Development of trade waste collection services;
- Acceptance of 'chargeable' trade waste at Household Waste Recycling Centres.

Although trade waste is not necessarily a priority for waste collection authorities it does have a duty under the Environmental Protection Act 1990 to make a service available on request and therefore it should be expected, as a service, to make a contribution to the efficiency programme. The ability to find routes for 'cheaper' disposal of trade waste may also improve the marketability of in-house trade waste collection services and for this reason this Project Element has been linked to delivering the outcome of PE1 Maximising the Value of Spare Capacity at MBT facilities.

Findings

Trade Waste Collection Services

The review of trade waste collection services focused on the benefits and costs of targeting long term growth in business to realise greater income compared to realising a one-off financial benefit arising from a trade sale of the trade waste service to a third party provider.

Table 2.1 provides a high level summary of the relative benefits of each proposal:

	Option 1: Business growth	Option 2: Trade sale
Benefits	Income retention	One-off revenue gain
	Full control of service	Transfer of operational risk
	Direct ability to source waste for MBT 'spare' capacity	No exposure to price volatility

Option 1: Business growth		Option 2: Trade sale
	Stronger control over 'over-production' of trade waste	May make wider outsourcing / packaging options more attractive to the market
	Ability to introduce initiatives to target recycling of trade waste	Council no longer liable for bad debts
Costs	Retention (and potential increase) of sales and marketing overheads to retain market share	Lose of direct control leading to higher enforcement costs
	Pricing structure remains sensitive market fluctuations	Further fragmentation of service delivery in key locations e.g. city centre
		Loosen of powers of direction to source waste for MBT 'spare' capacity

A high level review of the changing market conditions as they applied to those authorities currently running an in-house collection service noted that in the period 2007 to 2009 Allerdale BC and Copeland BC saw a reduction of 21% and 11% respectively of waste under contract, and a relative reduction in income, compared to a fairly static position in relation to the number of active local businesses operating in their locality. This would indicate that the economic climate, as reflected in price volatility and customer loyalty has had an adverse impact on in-house operations.

Chargeable Trade Waste at HWRCs

As part of the Project Element a number of local authorities with schemes for the charging of trade waste presented at HWRCs were contacted and agreed to take part in short survey. The following authorities submitted returns:-

- Buckinghamshire County Council;
- City of York;
- Liverpool City Council;
- London Borough of Bromley (LB Bromley);
- Suffolk County Council.

Of those only the London Borough of Bromley were able to provide any historical data because their charging scheme has been in place since 2006. All other responding authorities considered the length of implementation too short to provide any reliable data from which a detailed analysis could take place and therefore reasonable conclusions drawn.

A recent drop-off of in loads presented at the HWRCs managed by LB Bromley in 2011 to date is linked to wider continuing economic pressures faced by local businesses rather than any particular pricing strategy.

Over the period 2007 to 2011 LB Bromley has been able to generate additional income in excess of £4 million arising from the introduction of charges for the presentation of trade waste at its network of HWRCs.

However, it is acknowledged that the potential market for HWRC trade waste customers is limited compared to a typical London Borough and further market research would be needed to fully understand the potential market-base and therefore better understand the income potential of such a change.

This Project Element is likely to directly benefit Cumbria County Council because of their duty to manage, under contract, the HWRC network. If implemented there may be a minor positive financial impact on waste collection authorities if trade waste is diverted through these facilities and therefore does not appear illicitly in household waste collections.

Evaluation

It was agreed that no separate evaluation would be undertaken because the Project Element was highly dependent on the appetite amongst member authorities to 'invest' in a service area that, although remains a statutory responsibility of waste collection authorities, does not directly impact on a number of key objectives of the EPW programme, namely maintaining and optimising recycling performance through collection, treatment and minimisation, securing an effective level of payment of Recycling Rewards, and realising benefits through closer service integration.

However, it was acknowledged that the cost effective treatment and disposal of trade waste would be a contributing factor in delivering the outcomes of *Project Element 1 Maximising the Benefits of Spare Capacity at MBT Facilities*.

Next Steps

It is recommended that Project Element 2 should not progress as a stand-alone project at this stage, and instead be absorbed into *Project Element 1 Maximising the Benefits of Spare Capacity at MBT Facilities* as a means of reducing the cost of trade waste going to landfill.

Key Points

- Requirement for further scenario modelling.
- Clear benefits from all authorities moving to a common collection methodology.
- PE would deliver significant savings.

Scope

The Project Element has looked at determining the potential level of efficiencies to be gained from member authorities agreeing to integrate service delivery and implement a common collection service across the whole of Cumbria. This report considers the impacts of all authorities moving to a commingled collection system however there are many different configurations that could be modelled and which will yield different saving profiles.

Findings

In preparing the modelling and financial analysis the project has looked at potential efficiencies driven by:

- A) Integration** – through the introduction of a common collection system across all of the six waste collection authorities; and
- B) Increased Efficiency** – through cross boundary working and changes to round configurations to reduce the impact of differential performance in current urban and rural collection rounds that allow for an increased tonnage per crew per day to be collected.

Given the physical, geographical and demographic mix of Cumbria there is a number of operational constraints limiting the scope for delivering efficiency savings in the absence of wider service integration. These include:

- Rural rounds with large distances between properties. This is reflected in the higher relative performance of collections in urban authorities such as Barrow BC and City of Carlisle;
- The high number of properties requiring a separate green waste collection, reaching 100% distribution in certain rural districts;
- Large distances between the main operational depot, the final collection property and the waste transfer station;
- The number of 'passes' a vehicle needs to make to each property, as determined by the relevant collection frequency. For rural collections this can mean that some rounds spend a majority of their time on non-productive work, for example, travelling to tip a full load.

In order to inform the evaluation of the Project Element the following assessment of operational and financial benefits have been broken down into the following sub-elements to show the individual and cumulative effect of integration:-

Sub-element 1a. **Alternate weekly collection of residual waste** based on provision of a 240 litre wheeled bin. Weekly collections to continue where properties are restricted to a 120 litre wheeled bin. Weekly sack collections to continue for properties unable to accommodate a wheeled bin. The adoption of a common service configuration will deliver improved vehicle utilisation and will allow for the retention of a lower level of 'spare' vehicles to cover maintenance and repairs;

Sub-element 1b. All waste collection authorities adopting **commingled collections of dry recyclables** based on the provision of a 240 litre wheeled bin. There will be additional capital expenditure to extend the coverage of properties with the relevant containerisation;

Sub-element 1c. The **re-routing of all green waste collections** across all waste collection authorities based on improved productivity;

Sub-element 1d. Single management team for all collection services;

Sub-element 2. Improved efficiency through **increased tonnage collected per crew per day and more productive working hours**.

The 'integrated' model, used within the financial assessment, includes the following characteristics:-

- A single, common collection system giving the highest degree of flexibility to work collection vehicles across current administrative boundaries;
- A round structure based on deploying crews from the nearest depot irrespective of administrative boundaries (using the proximity principles identified in Project Element 7);
- A pooled fleet of vehicles to reduce the overall number and the levels of retained 'spares'.

Operational Impact of Integration

The integrated collections model results in the following outputs:-

- A reduction of up to 18 crews needed to service residual, recycling, and green waste collections at an average cost of £130,000 per crew;
- Consolidation of six management teams into a single operation (based on a comparison with the structure used to manage the Somerset Waste Partnership);
- Extended coverage of properties receiving a commingled collection of dry recyclables; and
- Significant increase in volume of dry recyclables collected using the commingled system although a reduction in the value of the material collected.

Financial Impact of Integration

Table 8.1

Sub Element 1a-d	Reduction in Rounds	Financial Saving
Integrated Collections	14 to 18 rounds	£2.4m to £3.1m

This is broken down further in table 8.1.a showing the respective contributions of each of the sub elements 1a to 1d:

Table 8.1.a Financial Contribution: Sub Element 1a to 1d

	Option	Savings No of Rounds	Savings £m	Description
1a	Consolidating existing residual collection rounds	5 to 8	0.7 to £1.0	Reduction from re-routing residual collections across Cumbria
1b	Moving to commingled recycling collections across all waste collection authorities	6 to 7	1.0 to £1.1	Using less residual collection vehicles and collecting more recycling (but offset by cost of MRF processing)
1c.	Consolidation of all green waste collections	3	0.4	Reduction of green waste collection rounds through re-routing
1d.	Integrated management for collections	Less spare vehicles and reduced client functions	0.3 to 0.6	Saving through lower levels of spare vehicles and reduced management costs as 6 management teams are merged into a single unit.
Total Saving from all options 1a – 1d		14 to 18	2.4 to 3.3	Over 20% reduction in total collection costs

Financial Impact of Increased Efficiency

Data provided by waste collection authorities suggests that rounds should be optimised to achieve two full tips per crew a day for residual waste collections. This is evidenced by tonnages tipped per crew, which in turn is informed by the overall number of productive hours. Based on each round being able, on average, to achieve two full loads tipped per day in the urban areas and 1 full load per day in the rural areas, the following number of rounds can be saved:-

- Residual Waste: 4 rounds;
- Recyclables: 4 rounds;
- Green Waste: At least 1 round.

Table 8.2 shows the financial impact of those savings based on a typical cost per crew £130,000 for residual and recycling collections and £100,000 for green waste collection crews.

Table 8.2

Sub Element 2	Reduction in Rounds	Financial Saving
Improved Efficiency	8 to 10 rounds	£0.9m to £1.1m

Total Financial Impact of Integration & Efficiency

Because both sub elements are independent the total potential financial benefit is the cumulative impact as set out below in Table 8.3.

Table 8.3

Sub Element	Reduction in Rounds	Financial Saving
Integrated Collections	14 to 18 rounds	£2.4m to £3.1m
Improved Efficiency	8 to 10 rounds	£0.9m to £1.1m
Total Estimated Saving	22 to 28 rounds	£3.3m to £4.2m

Impact of Commingled Collections on Recyclate Income

The Project Element has also tested the financial impact of joint marketing of recyclates when different collection methods are employed. Table 8.4 shows the financial differential between prices likely to be obtained if member authorities are able to source segregate compared to commingled. This is an important factor that needs to be taken into account when considered the modelled assumptions that drive the evaluation of Project Element 8 Alternative Collection Methodologies.

Table 8.4 Income from sourced segregated recyclables compared to income from commingled recyclables.

Collection Methodology	Income
Source segregated kerbside 21/13	£1,537,696
MRF processed co-mingled 2012/13	£554,212
Difference	£983,484

The value of commingled recyclates has been determined as follows in table 8.5:-

Table 8.5 – Calculation of income from commingled material.

	Per tonne
Value of source segregated materials (Blended rate based on the composition of waste in Cumbria: Entec Waste Composition Report 2005)	£101.00
Value for MRF processed material (75% of blended rate)	£76.00
MRF processing costs	£35.00
Revenue if MRF processed	£41.00
25:75% split with reprocessor	£30.75

Additional Operational Benefits

In completing the assessment a number of additional operational benefits will be realised that are difficult to quantify in monetary terms and have therefore been excluded from out financial assessment. These include:

- More cost effective deployment of in-cab mobile communications technology (based on economies of scale), leading to improved real time performance information for the customer.
- Increase market interest from the waste management industry leading to improved levels of competition that will ensure a range of competitively priced bids.

Evaluation

During the course of completing the evaluation of Project Element it was recognised that the outcomes of the modelling undertaken to date only represented one service configuration (e.g. comingled recycling and alternate weekly collections of residual waste)

It was agreed that in order to reach a more definitive conclusion on the potential costs and benefits of alternative collection methodologies a number of different service configurations should be modelled. These were subsequently agreed as those shown in table 8.6.

Table 8.6 – Further collection methodology scenarios to be modelled.

Scenario	Elements
2. Commingled recyclables, alternate week residual	Alternate week collection of Residual Waste Alternate week collection of Green Waste Alternative week collection of Commingled recyclables
3. Commingled recyclables, weekly residual	Weekly collection of Residual Waste Alternate week collection of Green Waste Alternative week collection of Commingled recyclables
4. 2 stream recyclables, alternate week residual	Alternate week collection of Residual Waste Alternate week collection of Green Waste Alternative week collection of 2 stream recyclables (Paper/Card, Plastics/Cans/Glass)
5. 2 stream recyclables, weekly residual	Weekly collection of Residual Waste Alternate week collection of Green Waste Alternative week collection of 2 stream recyclables (Paper/Card, Plastics/Cans/Glass)

Consequently, only an interim evaluation has been included in this report.

Evaluation Criteria	Results
Level of Savings	Up to £4.4 million per year (based on the collection of comingled recycling and alternate weekly collections) subject to participation of each waste

Evaluation Criteria	Results
	collection authority at the expiry of their current contract term less any loss in income from the sale of commingled recyclables (compared to the value derived from source segregated collections). The level of savings will also be affected by any costs associated with the termination of waste collection contracts if all authorities agree to integrate to a single, common collection system at the beginning of the implementation project.
Impact on Recycling Rewards	The Project Element will generate savings to offset Recycling Rewards from 2014/15. A share mechanism will need to be agreed between relevant District Councils and County Council to distribute the savings equitably.
Service Level	<p>The Project Element will deliver significant improvements in service levels in respect of:-</p> <ul style="list-style-type: none"> • The quantity of recyclable materials being collected; and • The range of materials being collected.
Customer Satisfaction	The Project Element likely to deliver an improvement in customer satisfaction because the project is increasing the range of materials collected using a common system, and providing a simplified and more uniform service across the whole of Cumbria.
WRAP Collection Commitment	<p>The Project Element will have a positive impact on between two and five of the WRAP Collection Commitments including:-</p> <ul style="list-style-type: none"> • New forms of resident communication to reflect a simplified collection system; • Fewer black collections so reducing the amount of litter; • Increased coverage of the commingled collection service.
Health & Safety	The Project Element will significantly decrease the likelihood of a breach of H&S legislation by the member authorities because it is contributing to a safer system of working.
Carbon	Project Element will give a slight reduction in the level of carbon produced through the delivery of services.
Contract	The Project Element will be very difficult to deliver as it will require significant contract negotiation with two or more of the waste collection authorities which will result in significant cost and time implications.
Political	The Project Element will be very difficult to be delivered as it will require significant further work and discussion to fully engage all authorities leading

Evaluation Criteria	Results
	political groups.
Inter-dependency	The Project Element is interdependent on other projects for all authorities and will require significant amendments, changes or additional work will be required to enable the project to be delivered.
Governance	The Project Element will require significant changes in delivery and / or governance structure which will require the authorisation from outside of the CSWP / EPW Delivery Team by some or all of the authorities.

Next Steps

Before final evaluation can take place Kinetic CS will complete the modelling of the additional scenarios required and the outcomes circulated to all member authorities. A further meeting of all member authorities will need to take place to conclude the evaluation process and consider the next steps for this Project Element.

Ahead of the final evaluation member authorities should be aware of the following project constraints:-

- Changes to the configuration and methods of collecting residual waste may have a material impact on the current treatment and disposal contract with Shanks Waste Management and therefore early discussions with Cumbria County Council are advisable;
- For integration to deliver the optimal level of savings future collections will need to operate within a single unified contractual framework. This will require existing waste collection contracts to be incorporated at the end of their current contract terms;
- Political deliverability is closely linked to the key decision to test the service in the market and is likely to lead to existing in-house services 'outsourced' as part of the project implementation; and
- The development of a transparent 'share mechanism' to ensure that the financial benefits are equitable.

If, at the point of evaluation, a decision is reached to recommend that Project Element 8 be included in Stage 3 of the EPW programme there are a number of key actions that will need to be progressed quickly to inform its timely implementation. These include but are not limited to:-

- Completion of a more detailed route optimisation exercise to confirm that estimated levels of performance under the integrated model are achievable;
- Trialling of a sample number of re-configured rounds to better understand operational constraints, for example, narrow access, traffic density, etc.

- Review of any compensation clauses triggered by a reduction of waste presented to Shanks Waste Management under the terms of the current treatment and disposal contract; and
- A review of the likely implementation timetable to ensure that the financial impact of the two waste collection authorities, joining the arrangement on expiry of their current collection contracts, is properly factored into the final business case.

Key Points

- Demonstrates that by removing authority boundaries waste collection services can be delivered more efficiently.
- Linked to PE8 as a single waste collection methodology will cross boundary collections to drive delivery efficiencies.
- Requirement for detailed route analysis to be undertaken to evidence where actual savings may occur.

Scope

Project Element 7 has been developed in order to test the assumption that a more effective collection service can be organised across the whole of the County if route optimisation allows properties to be serviced from collection crews based at the nearest available operational depot irrespective of administrative boundaries. This will improve the cost effectiveness of collections because the number of routes operating with large periods of non-productive travel time will be reduced.

Findings

A detailed postcode analysis has been completed looking at the following information:-

- the distribution of all households within the boundary of Cumbria by postcode;
- the distribution of operational depots within the boundary of Cumbria by postcode; and
- the average travelling speed of collection vehicles when driving to the first collection points of the day.

This has been mapped in order to assess the potential impact of removing administrative boundaries when planning collection rounds for a common collection system.

The analysis has not taken into account the following operational considerations that would need to be assessed as part of a more detailed piece of work on route optimisation:-

- Total number of properties where a collection takes place from a communal collection point;
- Total number of properties where access is restricted therefore requiring dedicated or bespoke collection vehicles;
- Trade waste collections from commercial properties undertaken directly by the waste collection authority; and
- The relative coverage of properties receiving a kerbside recycling collection.

Tables 7.1 to 7.6 provide an illustration of the relationship between the total number of properties serviced by the member authority and the relative number of properties that fall within three parameters:-

- Those properties within 30 minutes travel time from the main depot;
- Those properties within 60 minutes travel time from the main depot;
- Those properties within 90 minutes travel time from the main depot; and
- Those properties that exceed 90 minutes travel time from the main depot.

The upper limit band for travel time i.e. properties that exceed 90 minutes travel time from the main depot have been chosen to reflect one of the key assumptions that all operational vehicles should be targeting approximately 6.5 net working hours per shift to optimise productivity.

Table 7.1 South Lakeland DC

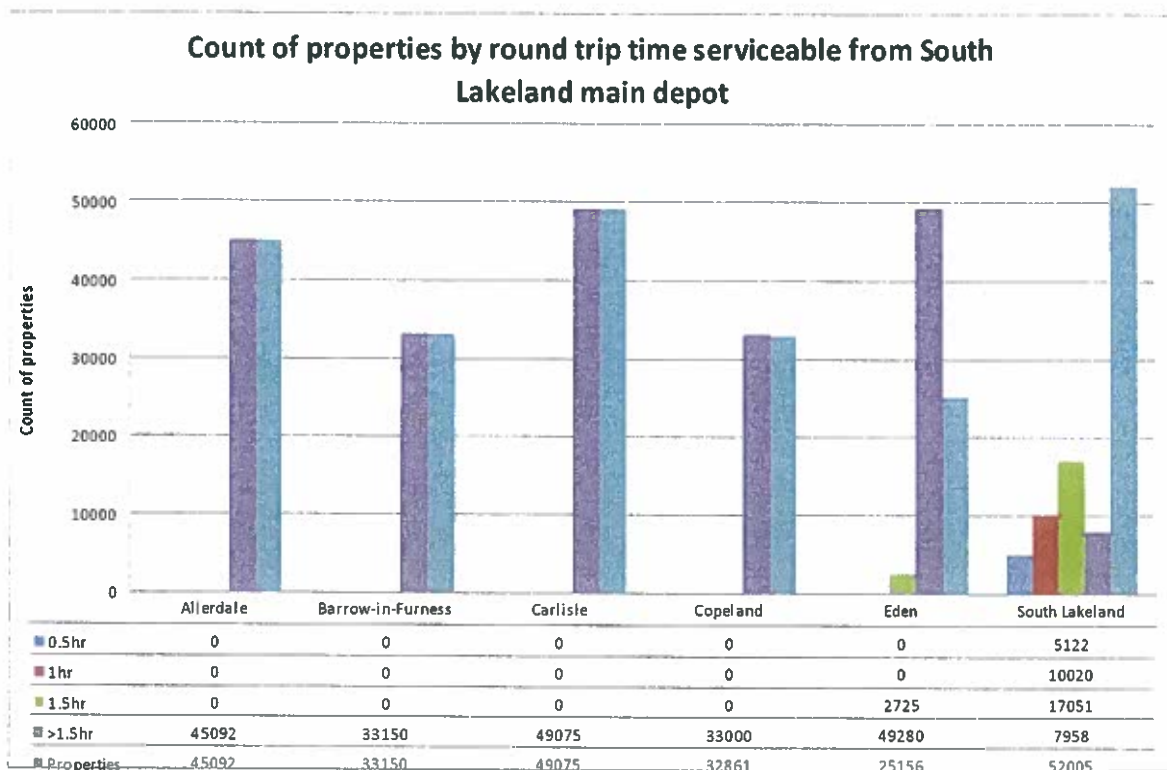


Table 7.2 Eden DC

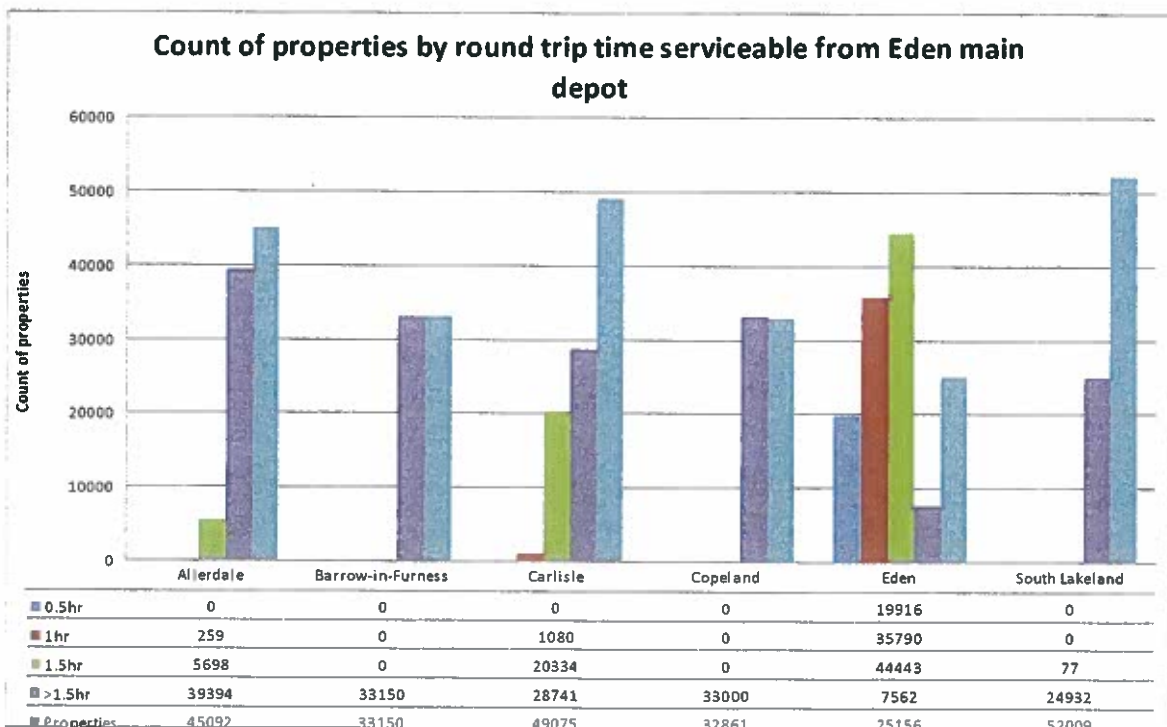


Table 7.3 Copeland BC

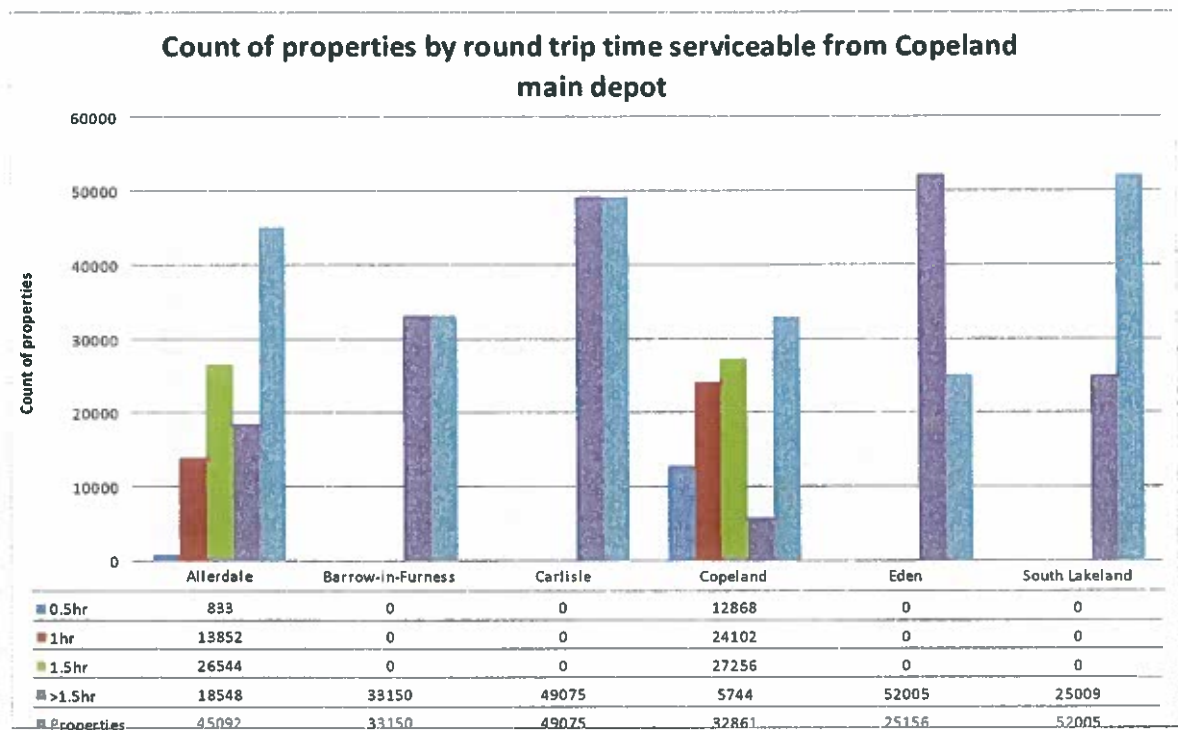


Table 7.4 City of Carlisle

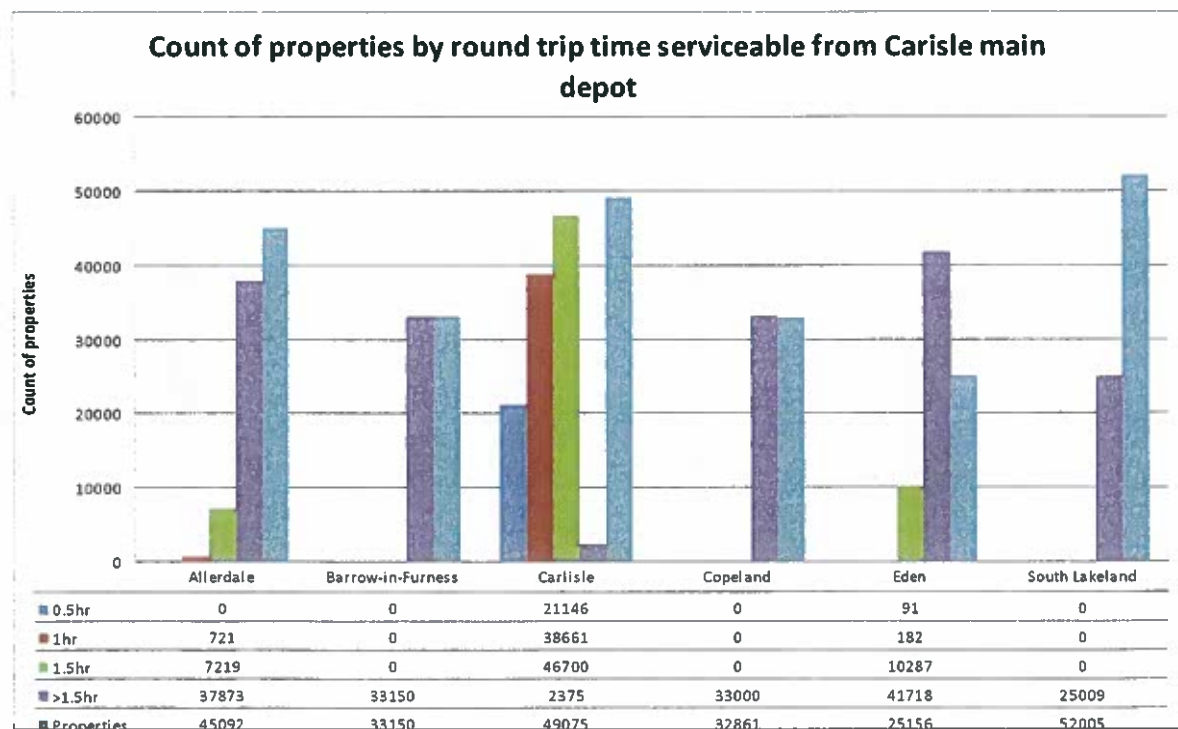


Table 7.5 Barrow BC

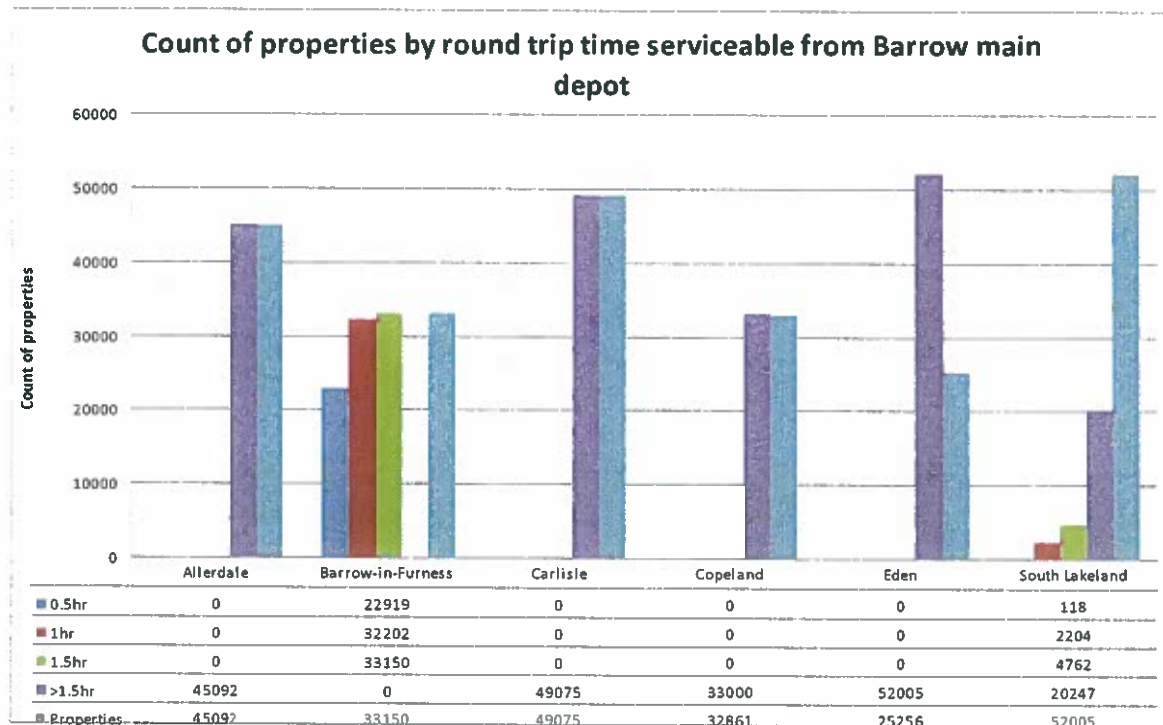
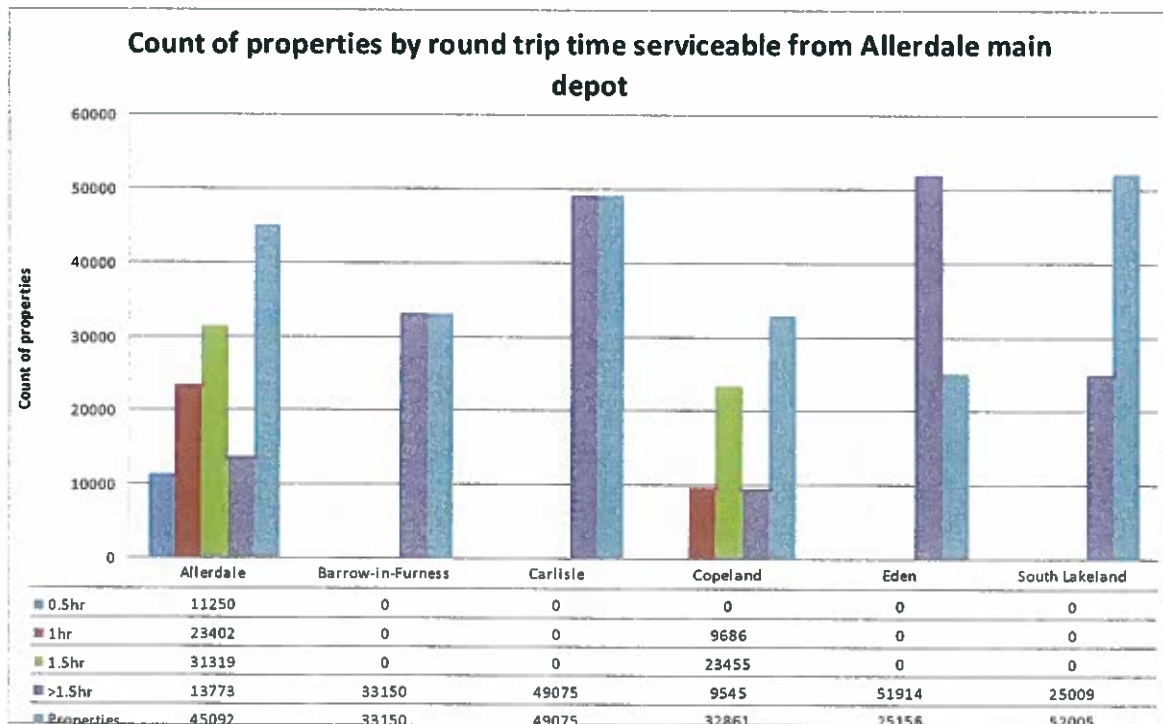


Table 7.6 Allerdale BC



What each of the tables highlight is that there is scope to build more effective, and therefore lower cost services, when 'cross boundary' operations are put in place.

Summary of Findings

Table 7.7 summarises the outcome of the postcode analysis based on furthest travel time from main depot showing that two collection authorities (Allerdale BC and South Lakeland DC) may be significantly better placed to offer lower cost collection services if 'near neighbours' are invited to operate some of their remote collection rounds. Conversely, there is limited opportunity for the two waste collection authorities covering the urban populations of Barrow and Carlisle because of the relative density of properties compared to the other waste collection authorities.

Table 7.7 – Postcode analysis

Main Authority	Number of properties with a travel distance of greater than 1.5 hours from its own depot	Presented as a percentage of the total property count
Potential Major Beneficiary		
Allerdale BC	13773	31%
South Lakeland DC	7958	30%
Potential Beneficiary		
Copeland BC	5744	17%
Eden DC	7562	14.5%
Potential Minor Beneficiary		
City of Carlisle	2375	5%
Barrow BC	None	0%

In order to realise the potential benefits of cross-boundary working it is important that revised collection rounds are designed taking into account which, if any, 'near neighbours' may be in a position to service closer properties.

Set out below is an explanation of which collection authorities could 'pair off' as near neighbours and review collection boundaries because of the proximity of the nearest depot. The groupings do not necessarily indicate the likely number of properties to be re-routed using 'near neighbour' resources but instead is meant to highlight the potential scope for efficiencies to be realised from this approach.

- Allerdale BC could be paired with Copeland BC because 71% of Copeland's properties are less than 1.5 hours travel time from Allerdale's main depot.

- Copeland BC could be paired with Allerdale BC because 59% of Allerdale's properties are less than 1.5 hours travel time from Copeland's main depot.
- Eden DC could be paired with City of Carlisle because 44% of City of Carlisle's properties are less than 1.5 hours travel time from Eden's main depot.
- Barrow BC could be paired with South Lakeland because 28% of South Lakeland's properties are less than 1.5 hours travel time from Barrow's main depot.
- City of Carlisle could be paired with Eden DC because 20% of Eden's properties are less than 1.5 hours travel time from Carlisle's main depot.

In order to maximise the benefit of organising resources on a cross-boundary basis a full and complete route optimisation exercise would need to be carried allowing properties from more than two, and potentially from every waste collection authority to be 'matched' against the nearest main depot.

The findings of PE7 Applying the Proximity Principle for Waste Collection clearly show that the assumptions built into the efficiencies highlighted in PE8 Alternative Collection Methodologies are robust and warrant further, more detailed examination.

Evaluation

Project Element 7 has not been evaluated separately but instead has been recognised as a contributing factor that will inform the overall evaluation of Project Element 8 Alternative Collection Methodologies that looks at the potential efficiencies to be gained by waste collection authorities moving to an integrated and common form of collection. Where integration takes place, and common collections take place the potential impact of cross-boundary collections increases.

Although a detailed evaluation has not been completed the following issues are worth noting and should be included in any final decision on whether to include as part of Stage 3 of the EPW programme:-

- Reducing the overall net miles travelled will produce a net carbon benefit;
- There has to be wide political acceptance that neighbouring authorities are encouraged to undertake collections in the recipient authority where this can deliver lower net costs;
- Although this Project Element could be taken forward in the absence of *Project Element 8 Alternative Collection Methodologies*, the net benefits will be higher where common collection systems exist and the most optimised route can be chosen based on the nearest available depot.

Next Steps

If this project is included in the EPW Stage 3 programme, either as a stand alone project as part of *Project Element 8 Alternative Collection Methodologies*, a more detailed route analysis will need to

be undertaken in order to detail operational collection routes likely to be optimised if cross-boundary operations are implemented.

Key Points

- PE only outlines savings for a small range of consumables, more should be considered.
- PE will deliver greater benefits if PE 8 is progressed.

Scope

The objective of Project Element 4 is to examine and test the scope for savings where member authorities agree to undertake joint procurement across a range of common usage consumables, for example, wheeled bins.

The review has analysed typical levels of expenditure against a number of regular and common purchases by each of the waste collection authorities including not limited to:-

- Coloured refuse sacks;
- Wheeled bins (120 litre, 240litre wheeled bins, Eurobins); and
- Recycling boxes (55 litre).

Findings

The project identified synergy between all of the waste collection authorities where similar patterns of procurement, by those authorities with identical collection systems for each of the main waste streams, can be expected over a period of time. However, the actual pattern of purchasing is heavily influenced by local circumstances, for example, the time that has elapsed since the introduction of containerisation (wheeled bins).

The variation in patterns and volume of purchasing appears to directly affect the unit price achieved by each member authority. This is evidenced in the differential of actual prices achieved across each of the member authorities:-

- For 240 litre wheeled bins the best unit price achieved was 12% lower than the most expensive unit price;
- For 55 litre recycling boxes the best unit price achieved was 33% lower than the most expensive unit price;
- For 360 litre wheeled bins the best unit price achieved was 40% lower than the most expensive unit price.

Based on the information set out above a comparative analysis of potential savings was undertaken to identify the potential savings that could have been realised if all waste collection authorities had been able to purchase at the lowest available unit price. Table 4.1 below shows that on a total

expenditure of just under £200,000 the four member authorities that completed the purchasing survey could have realised savings in excess of £13,000 or equivalent to a 7% saving.

Table 4.1 Comparative savings based on lowest unit price

	Total annual quantity	Total annual price	Minimum purchase price	Minimum annual price	Saving	District	Supplier
Black Sacks	924400	£30,173.60	£0.029	£26,807.60	£3,366.00	Copeland	Imperial Polythene
55l box	12350	£28,999.00	£2.19	£27,046.50	£1,952.50	Copeland	Straight plc
240l bin	6384	£111,111.10	£16.40	£104,697.60	£6,413.50	Copeland	Plastic Omnium
360l bin	422	£20,578.00	£44.00	£18,568.00	£2,010.00	Allerdale	MGB
Total saving					£13,742.00		

Evaluation

Evaluation Criteria	Results
Level of Savings:	The Project Element is likely to realise savings estimated to be in the region of £30k per annum across all purchased consumables across all of the participating waste collection authorities (equivalent to a 7% potential saving based on the levels of expenditure confirmed by four of the six waste collection authorities).
Recycling Rewards	Savings are likely to be available to off set Recycling Rewards in 2012/13 onwards. Share mechanism to be agreed between the participating member authorities.
Service Level	The Project Element will deliver no positive or negative change in service level.
Customer Satisfaction	The Project Element is likely to deliver an improvement in customer satisfaction because services being delivered at lower cost with all other things being equal.
WRAP Collection Commitment	The Project Element will have neither a positive or negative impact on the WRAP Collection Commitments.
Health & Safety	The Project Element is unlikely to increase or decrease the likelihood of a breach of H&S legislation.
Carbon:	The Project Element will give a slight reduction in the level of carbon

Evaluation Criteria	Results
	produced through the delivery of services because the implementation of joint purchasing should allow an overall lower level of retained stock to be held across the member authorities. This in turn helps reduces the level of transportation of goods and materials.
Contractual	The Project Element will have no impact on existing service delivery contracts and can be implemented in a moderate time frame i.e. between 6 months and a year.
Political	All relevant authorities leading political groups support the project although Executive agreement is required before the PE can be delivered.
Inter-Dependency	The Project Element is independent from all other proposed projects for 3 or 4 authorities.
Governance	The project will require significant changes in delivery / governance structure, which will require authorisation from outside of the CSWP & EPW Delivery Team by some of all of the relevant authorities because the implementation of the Project Element is likely to require a change to the Procurement Standing Orders of participating authorities.

Next Steps

The Project Element identifies scope to realise real cashable savings by aligning the purchasing of key consumables by more than one member authority. There are a number of ways this can be achieved with options including:-

- Member authorities using existing Framework Agreements. Our review identified recent purchases through two major Framework Agreements, however, savings will only be realised if the items for purchase are available through a relevant Framework Agreement; and
- Establishing a new regional Cumbrian 'purchasing club' or seek to join any existing regional purchasing club where it can be demonstrated that the economies of scale will apply for the types of materials and consumables required. This option has the potential to deliver a more tailored and focused purchasing agreement but carries with it set up and administration costs.
- Purchasing officers in each of the districts to set up a working group to take project forward on behalf of the EPW Delivery Team.

Although the Project Element does not deliver significant levels of savings more effective purchasing will directly contribute the efficiency programme of each member authority. Furthermore,

the framework for sharing the financial benefits is simple and all savings can be directly allocated based on the overall level of purchasing undertaken by each participating authority. This Project Element will be even more important if PE 8 is taken forward in the future. It is recommended that Project Element 4 shall be included in Stage 3 of the EPW programme.

Key Points

- Requirement for a uniform Waste Data Flow recording spread sheet.
- Greater benefits if PE8 delivered.

Scope

The scope of this project has been developed in order to look at how data is managed from source i.e. at the point that weighbridge tickets are generated, through to 'final' destination i.e. as an input to Waste Data Flow and other local reporting frameworks.

In particular, the six District Councils and Cumbria County Council are dependent on each other for the timely transfer and sharing of data in order that the implementation and review of waste management strategy, policy and operations is based on information that shows the 'complete picture' and not a partial view because of limited data sources.

Findings

Each EPW member authority has introduced bespoke arrangements for the management of waste-related data.

The separation between waste collection and waste disposal authorities does mean that relevant waste-related data does need to be regularly transferred between the respective authorities. In the absence of a common format the risk of error increases significantly.

The requirement to submit tonnage data to the Environment Agency via WDF has created some confusion about exactly what needs to be reported against each of the required fields. Adopting a common format for reporting data will provide the framework (and methodology) for agreeing definitions and highlighting where source data originated from.

Although the adoption of standard form of reporting may result in a reduction in time spent on managing and manipulating source data the cashable savings are very limited. This is due to the fact that officers involved in data management perform this function alongside a range of other duties. With the exception of the County Council no member authority has an officer dedicated to handling, manipulating and reporting tonnage and other waste performance related data.

Any time released, as a direct result of the introduction of standard form reporting is most likely to be used by authorities to increase the amount of time analysing trends to drive operational improvements and efficiency resulting in limited cashable savings as a direct result of this project. The quarterly submission of tonnage data, as part of the WDF requirements, will be significantly improved by the use of standard form reporting across all EPW member authorities. The sharing of

data between WCA and WDA in a standard form will reduce the risk of error and will make the quarterly and annual reconciliation of tonnages a more efficient process. However, the likely process improvement is not sufficient to drive any cashable financial savings.

The 'mixed economy' of third party recycling means that each authority faces difficulties in compiling timely data. Although the implementation of standard form reporting will not remove the complexity or necessarily improve timescales for submission of data from third party organisations it will help identify where those 'gaps' exist.

Evaluation

Evaluation Criteria	Results
Savings	The Project Element delivers no identified savings.
Recycling Rewards	The Project Element delivers no savings to off set recycling rewards.
Service Level	The Project Element will deliver no positive or negative change in service level.
Customer Satisfaction	The Project Element is neutral in terms of customer satisfaction.
WRAP Collection Commitment	The Project Element will have neither a positive or negative impact on the WRAP Collection Commitment.
Health & Safety	The Project Element is unlikely to increase or decrease the likelihood of a breach of H&S legislation.
Carbon	The Project Element will have no effect on the level of carbon produced through the delivery of services.
Contractual	The Project Element is slightly difficult to deliver in respect of existing contracts but these can be easily overcome without impacting on cost and/or time because it may require the agreement of contractors to revise the format and timing of performance data submitted to Council.
Political	All relevant authorities leading political groups see the advantages of the project although further work / communication is required to fully cement support for its delivery.
Inter-Dependency:	The Project Element is inter-dependent on other projects for all authorities

Evaluation Criteria	Results
	and significant amendments / changes / work will be required to enable the project element to be delivered.
Governance:	The project will require significant changes in delivery / governance structure, which will require authorisation from outside of the CSWP & EPW Delivery Team by some of all of the relevant authorities because it will require a fundamental review of corporate customer care policies and systems.

Next Steps

All member authorities acknowledged the potential benefit of working to an agreed template for the sharing of tonnage data used by both waste collection authorities and the waste disposal authority to support more accurate and timely submissions as part of their obligations under Waste DataFlow regulations. A standard template will be produced by Kinetic CS, based on best practice identified as part of this Project Element, and circulated to all member authorities with a view to common adoption at the earliest opportunity.

If the CSWP decide to progress PE8 Alternative Collection Methodologies and/or PE10 Alternative Governance Arrangements then this Project Element should be re-evaluated on the grounds that the conditions necessary to deliver more cost effective delivery of data management are more likely to apply.

Key Points

- Should be reconsidered if PE 8 delivered.

Scope

Project Element 6 has examined the arrangements in place across all member authorities for managing customer contact as it relates to waste management services. In particular it has looked at opportunities for establishing and operating joint or integrated Contact Centres.

Findings

For waste collection authorities the provision of a highly effective customer interface is critical to the successful operation of frontline services. This has been supported by the trend of developing an integrated approach to customer contact through the establishment of call centres and the use of customer relationship management systems.

- Strategic importance of waste-related customer contact

This has been evidenced by the fact that member authorities recognised that between 40% and 60% of all customer contact for district councils relates to waste management and its related areas of activity. This is further supported by the fact that during seasonal periods, for example, during inclement weather, the demand for information relating to service provision can peak significantly. However, it was also recognised that detailed and reliable information relating to the volume, type and range of waste-related customer contact is not always a prescribed feature of corporate CRM systems and this was evidenced by the fact that in a number of authorities certain types of contact where issues or requests can be resolved at the point of first contact are not logged within CRM. This can create a lack of transparency and this is reflected in the absence of detailed data relating to the direct and indirect costs to the waste management service of corporate recharges for the management of call and contact centres. This is illustrated in table 6.1 below that shows a high degree of variation of the relevant overhead costs, and therefore the cost of managing customer contact to each of the five waste collection authorities below.

Table 6.1 – % split of WCA costs

Authority	Refuse Direct (Contractor)		Refuse Indirect		Refuse O/H		(Contractor)		Recycling Indirect		Recycling O/H	
	Cost	% of Total	Cost	% of Total	Cost	% of Total	Cost	% of Total	Cost	% of Total	Cost	% of Total
Allerdale BC	£1,260,059	32	0	0	£216,725	5	£2,172,253	55	0	0	£313,698	8
Barrow BC	£911,347	44	0	0	£425,720	21	£633,067	31	0	0	£98,642	5
Carlisle CC	£1,192,233	40	0	0	£341,872	11	£1,175,870	40	0	0	£263,548	9
Copeland BC	£1,275,641	59	£20,534	1	£61,268	3	£729,323	34	£41,204	2	£42,038	2
South Lakeland BC	£1,100,380	38	£51,409	2	£186,102	6	£1,278,035	44	£214,899	7	£103,127	4

Whilst the integration of customer contact for waste management within a corporate approach is the most effective way of managing customers within an authority it does pose real strategic and

practical problems in terms of attempting to isolate and 'unpick' waste related contact from all other forms of contact handled by those corporate systems. The risk of repackaging all waste related contact into an area or regional framework and generating direct savings for waste collection services is that the project also creates significant dis-benefits through the loss of economies of scale for all other forms of contact.

In order to evidence the relative merits of this approach a more detailed business process mapping exercise would need to be undertaken which falls outside of the remit of this review.

- Self-serve options

One area where potential for indirect saving exists is in relation to 'web-based self serve' where service requests, generated by the customers using web-forms, are integrated directly into the works order management systems of the frontline service provider in order to generate relevant job tickets. This potentially leads to a situation where fewer resources are required at the contact centre to log and handle service requests currently delivered via face-to-face contact, telephone calls, or emails. A number of member authorities identified this as a relative weakness in their own service area.

- The importance of real-time data

Another factor that needs to be considered as part of any 'business case' for reforming the way that customer contact is delivered is the appetite within member authorities for access to real-time performance data.

The trend in recent waste related procurement has seen the specification of significantly improved access to real-time performance data as part of the client monitoring framework Examples of which include:-

- Monitoring of crew performance using vehicle tracking;
- Reporting of bins not presented for collection using in-cab mobile devices;
- Managing performance against service standards and response time for incidents such as fly-tipped waste; and
- Handling payments and booking appointments for bulky waste collections at the first point of contact.

It is clear that one of the reasons for requiring new standards of reporting real-time performance is to improve access to the service for residents and other service users. This has a direct effect on the form and scope of customer contact systems used by each member authority. The investment in new front and back office systems, to manage real-time performance across waste-related services, can be prohibitive on an authority-by-authority basis but the scope to 'share' development and implementation costs increase where options in relation to integrated service delivery exist.

- Relationship to integrated service delivery.

The review has identified real opportunities to improve performance and reduce the cost of customer contact where integration between services takes place because the marginal cost of handling a 'unit' of contact can be reduced. Below we offer two forms of integration that could be considered further as part of this Project Element.

'Internal' integration. Scope exists to build integration around a common set of management systems used within an authority in order to build service and performance related metrics around a common data set. This approach has not been examined in detail as part of this review but offers opportunities to ensure a 'one council' approach to customer contact and thereby reduce overall levels of contact.

"External" integration. This provides for integration of customer contact between authorities and examples may include:-

- Improved consistency in providing answers to frequently asked questions where common service standards already apply;
- Managing with fewer baseline resources by being able to 'switch' resources between contact centre hubs during periods of peak activity in a given location or area; and
- Managing campaigns, for example, waste minimisation, more effectively where information on relative performance can be shared across boundaries.

This is likely to be more effective where member authorities are seeking to, or have already, aligned service delivery.

Evaluation

Evaluation Criteria	Results
Savings	The Project Element savings are not yet determined but are unlikely to be significant unless Project Element 8 is taken forward.
Recycling Rewards	The Project Element has identified no immediate savings available to off set recycling rewards.
Service Level	The Project Element will deliver no positive or negative change in service level.
Customer Satisfaction	The Project Element is neutral in terms of customer satisfaction.
WRAP Collection Commitment	The Project Element will have a neither a positive or negative impact on the WRAP Collection Commitment.
Health & Safety	The Project Element is unlikely to increase or decrease the likelihood of a

Evaluation Criteria	Results
	breach of H&S legislation.
Carbon	The Project Element will have no effect on the level of carbon produced through the delivery of services.
Contractual	The Project Element will be very difficult to deliver as it will require significant contract negotiations with two or more district collection contracts that will result in significant cost and/or time implications.
Political	The Project Element will be very difficult to deliver as it will require significant further work / communications / discussions to fully engage all authorities leading parties.
Inter-Dependency	The project is inter-dependent on other projects for all authorities and significant amendments / changes / work will be required to enable the project element to be delivered.
Governance	The project will require significant changes in delivery / governance structure, which will require authorisation from outside of the CSWP EPW Delivery Team by some of all of the relevant authorities.

Next Steps

If the member authorities agree to move forward with Project Element 8 Alternative Collection Methodologies the issue of managing customer contact will be a critical success factor, especially where integration between different district councils takes place. At a future point a more detailed cost / benefit analysis would need to take place taking into account as part of a broader integration project the following:-

- the overall scope of service;
- the balance between 'common' and 'local' performance standards;
- the demand for real-time performance information, and
- the role of client monitoring.

The development of a share mechanism is required to properly reflect those authorities with higher overall collection costs (namely, the host authority) because they are collecting from more properties and those authorities with net lower unit costs (the recipient authority) resulting from the removal of inefficient routes (i.e. routes with large periods of non-collection due to distances travelled to reach the furthest pick-up).

Key Points

- Evaluation Delayed until early 2012

Scope

The scope of Project Element 9 looks at the impact on waste collection authorities of the potential closure of Household Waste Recycling Centres (HWRCs). At the time of preparing this report work is still on going by Cumbria County Council (CCC) to prepare, consult and agree on potential costed options.

However, the County's key partners (Shanks Waste Management (SWM) and its sub-contractors have been asked to explore savings within the HWRC service that fall in two categories:-

- Savings that have no visible impact on the service users i.e. savings that are derived from amendments to Contract terms and or Sub Contract terms that will have a minimal impact on service provision; and
- Savings that arise as a result of reductions in services delivered to the public that in the case of the Contract and Sub Contract are attributable to the HWRC Service.

Set out below is a brief overview of the scope of issues under review:-

A. Savings that have limited impact on the service users

- Amendment of the treatment of some outputs of the ITSS
- Rationalisation of the remit of the HWRC Permit Line
- Amendment of the classification of specific waste streams received at HWRCs
- Rationalisation of the process of managing Hazardous Household Waste received at HWRCs

B. Savings arising as a result of reduction in services delivered to the public

B1. Implementation of seasonal opening hours

Examining an adjustment of opening hours to better reflect patterns of usage during the period November to March each year.

B2. Reduction of opening hours

Examining the impact of reducing the number of site that currently open 7 days a week and restricting those sites to opening only 5 days a week.

B3. Site Closures

Examining the impact of permanent site closures.

As part of the impact assessment on elements covered in part B, i.e. those savings arising from a reduction in service provision the review will need to comment on the following key issues as they affect waste collection authorities:-

- The likely displacement of waste, for example, increased levels of fly-tipped waste and hazardous waste left on the highway and therefore being dealt with by waste collection authorities;
- The increase in tonnages collection as part of the normal collections of residual waste and recyclables;
- The increased demand for collection of bulky waste direct from households;
- A decline in public satisfaction because local facilities are no longer available.

Next Steps:

The County Council review will inform budget considerations for 2012/13 and reports will be brought to a future meeting of the CSWP as required in order that the evaluation of the impact on waste collection authorities can be undertaken in accordance with the scope of Project Element.

Key Points

- Governance structure and arrangements dependent on which Project Elements are taken forward into Stage 3.

Scope

The scope of the Project Element was agreed as:-

- Summarising the range of legal forms for delivering waste services through partnership arrangements;
- Outlining where alternative delivery structures have been used by other waste collection and waste disposal authorities and establish the relevant advantages and disadvantages from each model of delivery.

Findings

The current two-tier delivery model places an obligation on waste collection authorities (District Councils) to collect residual waste and at least two types of recyclable waste from householders (section 45 Environmental Protection Act (EPA) 1990) and an obligation on waste disposal authorities (County Councils) for the disposal of household waste collected by the waste collection authorities (section 51 EPA 1990).

Across the UK waste collection authorities and waste disposal authorities have a number of options with regards to how these duties may be best discharged and a number of alternative governance arrangements are relevant including:-

- Inter-Authority Agreements and Unincorporated Associates;
- A Joint Committee with administering authority;
- A Joint Committee plus limited company;
- A Joint Committee plus limited liability partnership;
- A Joint Waste Authority;
- A Non Profit Distributing Authority;
- A Free-standing limited company; and
- A Freestanding limited liability partnership.

Alternative Governance Arrangements: Case Studies

As part of the review four case studies were chosen where alternative governance arrangements are in place and working towards delivering improved partnership working between waste collection authorities and waste disposal authorities:-

- Somerset Waste Partnership;
- East Sussex Waste Partnership;
- Kent Waste Partnership; and
- East London Waste Partnership.

Case study key highlights include:

Case Study 1 - Somerset Waste Partnership

The Somerset Waste Board (SWB) was established in October 2007 with the County Council and all District Councils participating so that waste disposal and waste collection functions are managed jointly across the whole of Somerset.

The partnership has been established so that SWB discharges both waste collection and waste disposal functions and that the Board is funded by an agreed 'budget pooling' mechanism.

The SWB is empowered to make all decisions relating to the provision of waste services in Somerset, but the ratification of the SWB's decisions is required to be taken at authority level where those decisions have:-

"a significant impact on budgetary contributions" or on "service design".

The constitution of the SWB has a number of key provisions including:-

- Transition arrangements dealing with the:-
 - Transfer of assets;
 - Transfer of Employees;
 - Transfer of contracts;
 - Use of depots;
- Budget and cost sharing arrangements;

Cost sharing principals have ensured that the relevant services administered by the Board and the cost of administration for the Board are shared on a fair and equitable basis between the Partner Authorities as follows:-

- Somerset County Council to be responsible for all disposal costs and any costs associated with the Landfill Allowance Trading Scheme (LATS);
- Client costs to be split on the basis of a split of 45.76:54.24 for the WDA and WCAs respectively with the WCA share calculated in equal proportion to the proportion of

residential properties registered for Council Tax in their area.

Case Study 2 - East Sussex Waste Partnership

The following authorities Wealden District Council, Rother District Council, Eastbourne Borough Council, Hastings Borough Council and East Sussex County Council (Lewes District Council did not agree to be part of the joint procurement) agreed in principal in 2011 to the formation of a Joint Waste Committee to oversee the establishment of a joint collection and street cleansing service and to ensure that the joint collection and street cleansing service is aligned, strategically and operationally, to the existing long term waste disposal and treatment contract let in 2003. Rother District Council will assume the role of the Administering Authority role for the Joint Waste committee on the basis that it would be preferable for a waste collection authority to take on the role to provide balance given the existence of long term arrangements for treatment and disposal of waste. Interestingly, each of the waste collection authorities expressed a preference for assuming the role of Administering Authority and Rother DC were appointed. Since the agreement to move to a Joint Committee the participating authorities have commenced the procurement of a joint service and have prepared relevant draft contract documentation that includes a payment and cost sharing mechanism that takes into account local factors such as local geographical and population densities.

Case Study 3 - Kent Waste Partnership

Since 2007 the Kent Waste Partnership (KWP) has been established as a joint working body covering each of the Kent local authorities. The Partnership has operated as a Joint Waste Management Committee made up of the relevant waste management or environmental portfolio holder for each Council. The Joint Waste Committee does not have any direct or separate powers, functions or duties.

Commencing in 2009 the KWP has driven forward a procurement programme that has seen local groups of waste collection authorities and the County Council work together to let a series of waste management contracts. The decision to group authorities together was taken in order to align future procurement taking into account different contract expiry dates that applied at the time.

The initial contract saw Dover District Council, Shepway District Council, Thanet District Council Canterbury City Council and Kent County Council coming together to let a single contract for a range of services included the collection waste and recycling and street cleansing activities for Dover and Shepway and the treatment of food and waste and recyclables from Dover, Shepway, Thanet and Canterbury from 2013. The arrangement allows each respective client team able to act on behalf of each Council.

Because the Joint Committee has no formal powers the waste collection authorities retain responsibility for the effective management of collection and street cleansing services and the County Council retains responsibility for managing all aspect of waste treatment and disposal.

Case Study 4 - East London Waste Partnership

The East London Waste Authority (ELWA) was established on 1 January 1986 as a statutory Waste Disposal Authority (WDA) by the Waste regulation and Disposal Order 1995. It is a local authority

in its own right with its own statutory powers and duties. It operates under a formal constitution with its 8 Board members appointed annually, two from each of the 4 Authorities (LB Barking & Dagenham, LB Havering, LB Newham and LB Redbridge).

In December 2002 Shanks Waste Management were appointed to take over full responsibility for the management of all disposal functions including the management of Recycling and Re-use Centres on behalf of the Authority.

Review of Different Legal Forms

Tables 10.1.1 to 10.1.3 below cover the three main forms of partnership that exist within our four case studies and each table provides a short commentary on the relevant advantages and disadvantages associated with the adoption and implementation of each of the models described.

Table 10.1.1

Legal Form	Advantages	Disadvantages
Inter Authority Agreement		
	<ul style="list-style-type: none"> • Informal • Relatively easy to set up • Partners can opt in and out • No immediate change required to the governance structure so reduces the risk of delays in decision making • No need for one authority to take additional risk as Administering Authority • Each authority can retain their monitoring and management structures. 	<ul style="list-style-type: none"> • No separate legal entity • Cannot enter into contracts or hold assets in their own name • Partners can opt in and out • Limited scope to make client function savings • Extends decision-making process as approval required by all authorities.

Table 10.1.2

Legal Form	Advantages	Disadvantages
Joint Committee with Administering Authority		
	<ul style="list-style-type: none"> • Effective decision making as Partnership Board holds decision-making powers • No need for a separate legal entity yet full functionality can be delegated to the Administering Authority • Either County or District Council can take on the role of Administering Authority (although in the situation where a district assumes that role a separate supplementary agreement may be needed to effectively manage variations to existing treatment and disposal contracts. 	<ul style="list-style-type: none"> • Cannot hold contracts, assets or be awarded direct funding from third parties. • Partners can only hold the Administering Authority to account, not each other • Services are managed through a single, central team that may reduce the flexibility in how services are delivered in each Authority. • A significant proportion of district council budget would be assigned to the Administering Authority.

Table 10.1.3

Legal Form	Advantages	Disadvantages
Joint Waste Authority		
	<ul style="list-style-type: none"> • A separate legal entity to act independently of member local authorities • Able to exercise all of the powers of a local authority • Can raise own budget through precepts levied on constituent local authorities • Able to enter into contracts and hold assets in its own right • Holistic approach to total system costs of waste management. 	<ul style="list-style-type: none"> • Never been set up to deliver both WCA and WDA functions. • Takes time to implement and would require setting up a new 'authority to manage all the waste services • Services are managed through a single, central team that may reduce the flexibility in how services are delivered in each Authority. • A significant proportion of district council budget would be assigned to the Joint Waste Authority.

Next Steps

In undertaking the evaluation of Projects Element 1 to 8 it has been recognised that the impact on governance arrangements from each project has a potentially differential effect. This means that the

relative advantages and disadvantages of any of the potential models will be heavily influenced by which project(s), if any, members of the CSWP wish to implement.

Consequently, no detailed evaluation has been possible and it is considered appropriate to review suitable governance arrangements once the potential profile of 'implementation projects' is better understood.

Part Three: Conclusions

The purpose of Stage 2 of the EPW programme has been to test a range of potential projects to determine the value and risks associated with member authorities implementing a programme of improvement based on the principles of closer or joint working.

In overall terms the EPW programme is likely to deliver the scale of financial benefits required in the current financial climate facing local authorities. More importantly, the scale of required savings is only likely to be achieved if all members of the CSWP agree to work together recognising that not all member authorities need to participate (or will directly benefit) from every Project Element proposed.

The challenges still facing the CSWP, as referenced to in the EPW programme, cannot be dismissed lightly. The individual project evaluations show that the benefits can be realised but the bigger challenges now lies in developing a suitable framework for project implementation. In particular the larger the potential financial benefit the harder implementation will be in terms of reaching an agreement, securing resources to implement and developing a mechanism for sharing the actual benefits realised. This is most evident with Project Element 8 Alternative Collection Methodologies where the maximum potential annual savings cannot be realised without all waste collection authorities participating, even if that means, committing to changing recently tendered services at the earliest opportunity.

The issue of how financial benefits are shared amongst participating authorities will take time and will require complex negotiations across all member authorities but this should not be used as a reason not to progress and to not make the changes needed to secure savings that will deliver improved value for money to the residents of Cumbria.

This report has not attempted to directly address the issue of the future of Recycling Rewards payments going forward into 2012/13 and beyond, however it does highlight some projects that should be delivered in the short and medium term which will help plug any shortfall in income to the districts from a change in the Recycling Reward payment. Further discussions will need to take place amongst member authorities on how best to secure the levels of recycling performance and waste prevention required to deliver on cost effective waste treatment and disposal. However, the EPW programme does show that the relationship between the operational and financial performance of the waste disposal authority and the waste collection authorities remain closely linked. The EPW programme also shows that benefits will be maximised where all member authorities can take a longer, more global view of the desired outcomes.

The Project Elements that Kinetic CS recommend are taken forward into are:-

- Project Element 1 – Maximising the benefits of spare capacity at the MBT facilities;
- Project Element 3 – Maximising income from the sale of recyclables;
- Project Element 4 – Joint Procurement of consumables;

- Project Element 8 – Alternative Collection Methodologies.

Subject to approval by member authorities Table 11 provides a high level overview of a prospective timetable covering the immediate tasks required to progress the implementation of the Project Elements key findings in the short term.

Table 11 Potential Project Implementation Timetable

Time Period	Project Element	Task	Owner
Jan 2012 to April 2012	PE3 Joint Sale of Recyclables	Put in place network of strategic waste transfer stations	CCC
		Agree authorities taking part in pooling of materials	All
		Agree Lead Authority	WCAs with tonnage available to pool
		Agree procurement strategy for pooled materials, including contract length and exposure to risk Agree income share mechanism	TBC
		Produce procurement documentation	TBC
		Develop MoU for the Project Element	TBC
		Run procurement	TBC
		Let contract	TBC
	PE8 Alternative Collection Methodologies	Carryout detailed modelling for the four additional scenarios	KCS
		Evaluate the four scenarios against EPW criteria	CSWP Board
	PE 4 Joint Procurement of Consumables	Agree Lead Authority	CSWP Board
		All authorities to confirm current stock and history of purchasing	EPW Delivery Team
		Develop MoU for the Project Element	Lead Authority
		Review current procurement routes and agree a framework to be used or go to market for suppliers for the EPW Project	Lead Authority
	PE 5 Data Management	Produce standard template to record data for WDF	KCS
	PE1	Discussions with SWM in respect to	CCC

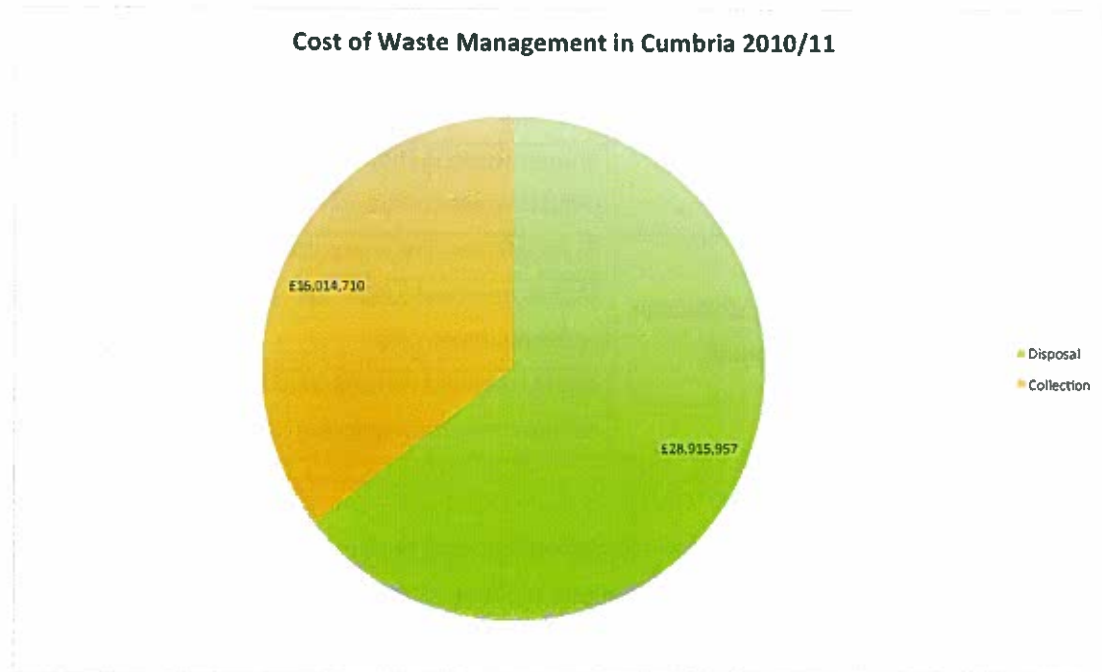
Time Period	Project Element	Task	Owner
	Spare Capacity at MBT Facilities	spare capacity	
		Develop options as to how spare capacity could be filled by the WCAs Agree mechanism for sharing the benefits	KCS
		Further work on the suitability of HWRC waste for the MBT facilities	CCC
May 2012 to July 2012	PE 8	Evaluate the 4 new scenarios	CSWP
	Alternative Collection Methodologies	Agree optimal solution and consider implementation plan	CEO/Leader
		Agree relevant procurement strategy to secure preferred optimal solution	CEO/Leader

This is a challenging timetable given the amount of work required to progress each Project Element but future benefits will not be realised without a prompt start and without resources committed to making things happen.

Finally, the potential EPW programme going forward will require the CSWP to review and amend its structure but until decisions are made about which Project Elements to progress into Stage 3 no firm conclusions can be drawn about what options may work best. But there are options and they will need to be fully debated before they are acted upon.

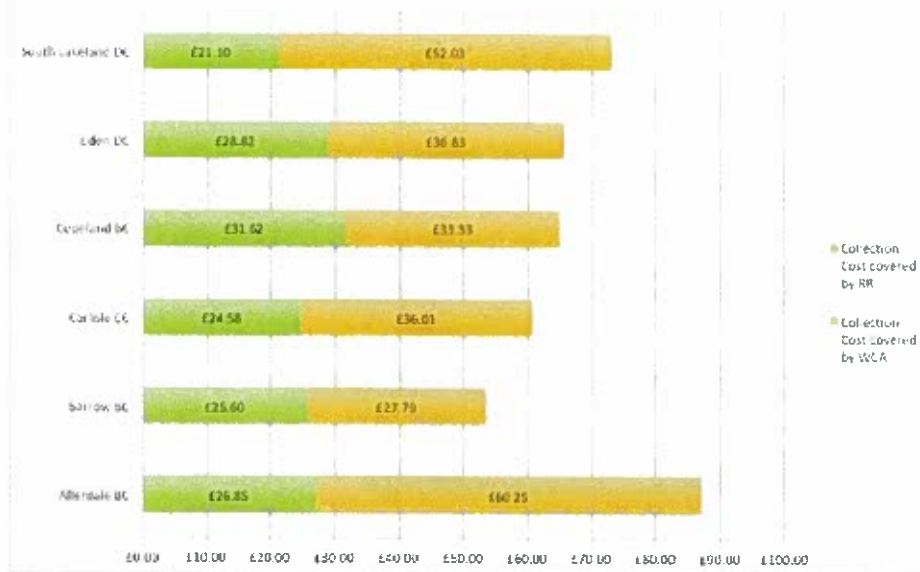
Appendix 1

Cost of Waste Management in Cumbria





Collection Costs paid for by WCA and WDA



Appendix 2

History to Cumbria Strategic Waste Partnership and Enhanced Partnership Working Project

The Cumbria Strategic Waste Partnership (CSWP) was established in 2004. Originally set up to address the pressures of the Landfill Directive, the goals of the CSWP are to:-

- Modernise Cumbria's approach to municipal waste management so that it contributes to a sustainable Cumbria;
- Implement a sustainable waste management programme; and
- Maximise the economic, environmental and social benefits to the people of Cumbria when managing municipal waste.

In December 2010 the CSWP Board appointed Beasley Associates to undertake a high level assessment of the options for enhanced partnership working in order to explore potential opportunities that may exist for efficiency savings through joint working. This work was commissioned against the background of significant reductions in government funding of local government, proposed changes to the Recycling Rewards scheme managed by Cumbria County Council, and the general recognition that the CSWP needed to develop its own role and remit further in order to make a positive contribution to the changing financial climate facing waste services.

The Beasley Report identified a number of options that required further development to ensure they were deliverable within the context of how waste was managed across Cumbria. The programme of work, referred to as the Enhanced Partnership Working Project (EPW) was established in Spring 2011.

In order to drive the Enhanced Partnership Working (EPW) project forward the CSWP Board agreed to appoint a project manager to work directly with Officers and the CSWP on a detailed appraisal process to identify the best approach for Cumbria. Kinetic Consultancy Solutions was appointed to carry out the role in March 2011 following a procurement exercise.

Appendix 3

Evaluation Criteria

Finance

A1 – Savings per authority

An anticipated monetary value will be provided for each authority for each project element where a saving can be identified. Information will be presented as follows: -

Authority	Value of Savings	Year saving to be realised	On-going savings (y/n)

A2 - Impact on Recycling Rewards

The following scoring mechanism shall be used to score each of the Project Elements in respect to impact recycling rewards.

Score	Definition
× × ×	Negative impact on recycling rewards, project element will increase reliance on recycling rewards on an on-going basis
× ×	No savings available to off set recycling rewards
×	Some savings but with some initial up front costs/investment required
✓	Savings available to off set Recycling Rewards from 2013/14 or 2014/15 onwards. Share mechanism to be agreed between relevant districts and County.
✓ ✓	Savings available to off set recycling rewards in 2012/13 onwards. Share mechanism to be agreed between relevant districts and County.
✓ ✓ ✓	Savings to be realised in 2012/13 onwards. No share mechanism required.

B – Quality

B1a – Service Level

The following scoring mechanism shall be used to score each of the Project Elements in respect to impact on service level.

Score	Definition
× × ×	Project element will result in a reduced service level in respect to: - <ul style="list-style-type: none"> Quantity of recyclable material being collected; Range of material being collected.
× ×	Project element will result in a reduced service level in respect to one of the following: - <ul style="list-style-type: none"> Quantity of recyclable material being collected; Range of material being collected.
×	Project element will deliver no positive or negative change in service level
✓	Project element will deliver improvements in service level in respect to one of the following: - <ul style="list-style-type: none"> Quantity of recyclable material being collected; Range of material being collected.

Score	Definition
✓✓	Project element will deliver improvements in service level in respect to two of the following: - <ul style="list-style-type: none"> • Quantity of recyclable material being collected; • Range of material being collected.

B1a – Customer Satisfaction

Score	Definition
x	Negative impact on customer satisfaction
-	No positive or negative impact on customer satisfaction
✓	Positive impact on customer satisfaction

B2 – WRAP Collection Commitment

The following scoring mechanism shall be used to score each of the Project Elements in respect to impact on WRAP Collection Commitment.

Score	Definition
XXX	Project Element will have a negative impact on 5 or more of the following WRAP commitments: - <ul style="list-style-type: none"> • explaining clearly what service residents can expect to receive; • providing regular collections; • providing a reliable collection service; • considering any special request that individual households may have; • designing service and carrying out collection in a what that doesn't produce litter; • collecting as many materials for recycling as is possible and explain what happens to them; • explaining clearly what the service rules are and the reasons for them; • responding to complaint received about the services; and • communicating to residents the Waste Collection Commitment.
XX	Project Element will have a negative impact on 2 to 5 of the following WRAP commitments:- <ul style="list-style-type: none"> • explaining clearly what service residents can expect to receive; • providing regular collections; • providing a reliable collection service; • considering any special request that individual households may have; • designing service and carrying out collection in a what that doesn't

Score	Definition
	<p>produce litter;</p> <ul style="list-style-type: none"> collecting as many materials for recycling as is possible and explain what happens to them; explaining clearly what the service rules are and the reasons for them; responding to complaint received about the services; and communicating to residents the Waste Collection Commitment.
×	<p>Project Element will have neither a positive or negative impact on the following WRAP commitments:-</p> <ul style="list-style-type: none"> explaining clearly what service residents can expect to receive; providing regular collections; providing a reliable collection service; considering any special request that individual households may have; designing service and carrying out collection in a what that doesn't produce litter; collecting as many materials for recycling as is possible and explain what happens to them; explaining clearly what the service rules are and the reasons for them; responding to complaint received about the services; and communicating to residents the Waste Collection Commitment.
✓	<p>Project Element will have a positive impact on at least one of the following WRAP commitments:-</p> <ul style="list-style-type: none"> explaining clearly what service residents can expect to receive; providing regular collections; providing a reliable collection service; considering any special request that individual households may have; designing service and carrying out collection in a what that doesn't produce litter; collecting as many materials for recycling as is possible and explain what happens to them; explaining clearly what the service rules are and the reasons for them; responding to complaint received about the services; and

Score	Definition
	<ul style="list-style-type: none"> communicating to residents the Waste Collection Commitment.
✓✓	<p>Project Element will have a positive impact on between two and five of the following WRAP commitments:-</p> <ul style="list-style-type: none"> explaining clearly what service residents can expect to receive; providing regular collections; providing a reliable collection service; considering any special request that individual households may have; designing service and carrying out collection in a what that doesn't produce litter; collecting as many materials for recycling as is possible and explain what happens to them; explaining clearly what the service rules are and the reasons for them; responding to complaint received about the services; and communicating to residents the Waste Collection Commitment.
✓✓✓	<p>Project Element will have a positive impact on more than 5 of the following WRAP commitments:-</p> <ul style="list-style-type: none"> explaining clearly what service residents can expect to receive; providing regular collections; providing a reliable collection service; considering any special request that individual households may have; designing service and carrying out collection in a what that doesn't produce litter; collecting as many materials for recycling as is possible and explain what happens to them; explaining clearly what the service rules are and the reasons for them; responding to complaint received about the services; and communicating to residents the Waste Collection Commitment.

B3 – H&S

The following scoring mechanism shall be used to score each of the Project elements in respect to impact on H&S.

Score	Definition
× × ×	The Project Element will significantly increase the likelihood of a breach to H&S legislation.
× ×	The Project Element will slightly increase the likelihood of a breach to H&S legislation.
×	Project Element is unlikely to increase or decrease the likelihood of a breach to H&S legislation.
✓	Project Element will slightly decrease the likelihood of a breach to H&S legislation.
✓ ✓	Project Element will significantly decrease the likelihood of a breach to H&S legislation.
✓ ✓ ✓	Project Element will eliminate the likelihood of a breach to H&S legislation.

C – Environment

C1 – Carbon

The following scoring mechanism shall be used to score each of the Project Elements in respect to impact on carbon produced directly through the delivery of the Project Element.

Score	Definition
× × ×	The Project Element will significantly increase the amount of carbon produced through the delivery of the services.
× ×	The Project Element will slightly increase the amount of carbon produced through the delivery of the services.
×	The Project Element will have no effect on the level of carbon produced through the delivery of the services.
✓	Project Element will give a slight reduction in the quantity of carbon produced through the delivery of the services in all applicable authorities.
✓ ✓	The Project Element will give a slight reduction in the quantity of carbon produced through the delivery of service in some of the applicable authorities and significant reductions in carbon for other applicable authorities.
✓ ✓ ✓	Project Element will give significant reduction in the quantity of carbon produced through the delivery of the services in all applicable authorities

D – Deliverability

D1 – Contractual

The following scoring mechanism shall be used to score each of the Project Elements in respect to impact on existing contractual arrangements either with the County's disposal/treatment contract or one or more of the districts collection contract.

Score	Definition
× × ×	The Project Element will be very difficult to deliver as it will require significant contract negotiations with two or more district collection contracts or one district collection contract and the County's disposal contract which will result in significant cost and/or time implications.
× ×	The Project Element will be moderately difficult to deliver as it will require significant contract negotiations with one district collection contract or the County's disposal/treatment contract which will result in cost and/or time implications.
×	The Project Element will be slightly difficult to deliver in respect to existing contracts but these can easily be over come without impacting on cost/and or time.
✓	Project element will have no impact on existing contracts but will require greater than 1 year to implement.
✓ ✓	The Project element will have no impact on existing contracts and can be implemented in a moderate time frame (6months – 1 year)
✓ ✓ ✓	Project element will have no impact on existing contacts can be implement quickly <6months.

D2 – Political

The following evaluation mechanism shall be used to the political willingness or opposition in respect to the delivery of each Project Element.

Score	Definition
× × ×	The Project Element will not be able to be delivered as it is likely to attract strong opposition from 2 or more authorities. No amount of additional communication/discussion and further work could over turn their position. Project Element cannot be delivered unless all authorities are on board.
× ×	The Project Element will be very difficult to deliver as it will require significant further work/communications/discussions to fully engage all authorities leading parties.
×	The Project Element will be moderately difficult to deliver and further work/communications/discussion will be required to fully engage some of the authorities leading parties.
✓	All relevant authorities leading political groups see the advantages to the project although further work/communication is required to fully cement support for its delivery.
✓ ✓	All relevant authorities leading political groups support the Project Element although Executive agreement is required before the Project Element can be delivered.
✓ ✓ ✓	All relevant authorities leading political groups strongly support the project and it's delivery. No Executive agreement is required before implementation.

D3 – Interdependency on other projects.

The following scoring mechanism shall be used to score each of the Project Elements in respect to its interdependency on other projects.

Score	Definition
× × ×	The Project Element cannot be delivered as it is dependent on too many other projects and no amount of additional work will make it deliverable for all authorities.
× ×	The project is interdependent on other projects for all authorities and significant amendments/changes/work will be required to enable the project element to be delivered.
×	The project is interdependent on other projects for all authorities although only minor amendments/changes/work will be required to enable the project element to be delivered.
✓	The Project element is independent from all other existing projects or proposed projects for 1 or 2 authorities and for those authorities where there is an interdependency only minor work is required to enable the project element to be delivered.
✓ ✓	The Project element is independent from all other existing projects or proposed projects for 3 or 4 authorities and for those authorities where there is an interdependency only minor work is required to enable the project element to be delivered.
✓ ✓ ✓	The Project element is independent from all other existing projects or proposed projects for all authorities.

D4 – Delivery structure/governance arrangement

The following scoring mechanism shall be used to score each of the Project Elements in respect to the requirement for an alternative delivery/governance structure to enable its delivery.

Score	Definition
× × ×	The Project Element will require significant changes in delivery/ governance structure, which will not be agreed by all relevant authorities.
× ×	The Project Element will require significant changes in delivery/ governance structure, which will require authorisation from outside the CSWP/EPW Delivery team by some or all of the relevant authorities.
×	The Project Element will require minor changes in delivery/governance structure that will require authorisation from outside the CSWP/EPW Delivery team by some or all of the relevant authorities.
✓	The Project Element will require minor changes required by all authorities but changes unlikely to cause significant problems and can be changed swiftly without authorisation from outside the CSWP Board/EPW Delivery Team.
✓ ✓	The Project Element will require no change in existing delivery/governance structure for the majority of relevant authorities, where a change is required these are only minor and unlikely to cause significant problems. Changes can be made swiftly without authorisation from outside the CSWP Board/EPW Delivery Team.
✓ ✓ ✓	No change in existing delivery/governance structure for any relevant authority required so the project element can be delivered immediately.

Appendix 4

Material breakdown of tonnage available to sell to market under pooled arrangement by Authority.

Kensdale

Authority	Paper		Card		Paper/card		Plastics		Cans		Glass		Co-mingled	
	Tonnage	Availability	Tonnage	Availability	Tonnage	Availability	Tonnage	Availability	Tonnage	Availability	Tonnage	Availability	Tonnage	Availability
Attitude BC					4971.04	2012							1695.46	2012
Barnow BC	1271.31	2017											3512.72	2017.00
Carlisle CC	3513	2015	1297	2012			978	2012	585	2015	2372	2015		
Copeland BC	1,508.66	2012	261.69	2012			261.69	2012	189.38	2017	192.48	2017		
Eden DC	726.6	2015			222.5	2015			87.58	2015	471.28	2015		
South Lakeland DC	4607.63	2012							667.50	2017	2003.71	2017		
Total	11075.51		1558.69		5203.54		1189.69		1514.34		5539.17		5706.18	
Total Available to sell from 2012/13	5514.10		1558.69				1189.69		1514.34		2896.19			

Gring Banks

Authority	Paper		Card		Paper/card		Plastics		Cans		Glass	
	Tonnage	Availability	Tonnage	Availability	Tonnage	Availability	Tonnage	Availability	Tonnage	Availability	Tonnage	Availability
Attitude BC					394.62	2012	123.60	2012	139.94	2012	1179.59	2012
Barnow BC												
Carlisle CC	612	2014	586	2014			197	2014	128	2014	885	2014
Copeland BC	921.44	2014	419.5	2014			186.78	2014	88.44	2014	711.40	2014
Eden DC					1300.56	2015	215.16	2015	110.91	2015	874.08	2015
South Lakeland DC	754.50	2014	533.21	2014	233.52	2014	426.76	2014	59.59	2014	863.62	2014
Total	2288		1539		1928		1149		527		4514	

Appendix 5

Project Element 8 Alternative Collection Methodologies: Modelling Assumptions

In preparing the detailed analysis the following assumptions were used:

General	
Number of Participating Authorities	All waste collection authorities
Modelling Period	7 years (April 2013 to March 2020)
Current Costs	Provided by each waste collection authority using template data sheet
Tonnages Collected	2010/11 Weighbridge Tickets & WasteDataFlow extracts
Operations	
Urban Collections:	
Definition	Less than 1 hour round trip from the Depot
Service Configuration	Alternate week 240 litre wheeled bins (residual and recycling)
Collection Method	26 tonne RCV
Crew Configuration	Driver plus 2 loaders
Number of Tips Daily	2
Non-collection Time Daily	1.5 hours
Daily Target Tonnage: Residual	16 tonnes per round per day
Daily Target Tonnage: Recycling	7 tonnes per round per day
Daily Target Tonnage: Green	16 tonnes per round per day
Round Utilisation	80%
Average Operational Cost per Round	£130,000
Rural Collections:	
Definition	Greater than 1 hour round trip from the Depot
Service Configuration	Single pass fortnightly collection of residual and recycling
Collection Method	26 tonne split bodied RVC

Crew Configuration	Driver plus 1 loader
Number of Tips Daily	1
Non-collection Time Daily	3 hours
Daily Target Tonnage: Residual	10 tonnes per round per day
Daily Target Tonnage: Recycling	5 tonnes per round per day
Daily Target Tonnage: Green	10 tonnes per round per day
Round Utilisation	83%
Average Operational Cost per Round	£100,000

Exclusions

The analysis has not taken into account the following elements of service delivery:

Service	Reason for Exclusion
Trade waste collections	Required to operate as 'break even' therefore resource inputs likely to have a marginal effect on the modelling outcomes
Bring bank collections	Service is operated using a different fleet profile. However, there are likely to be efficiencies from undertaking a separate integration analysis for this element of the service
Bulky waste collections	Service is usually provided on an 'appointment basis' and therefore underlying assumptions differ significant to the main service being modelled
Clinical waste collections	Specialist service

