

Waste & Recycling Trial Briefing Paper

This briefing paper is an interim report to show the initial results of the trial conducted for the new Waste and Recycling Scheme which is due to be introduced to all Mid Devon households during 2015.

Overview of Trial

A trial of the new Waste and Recycling Scheme was undertaken during the month of February and included 1,042 properties. All households selected were on one of two recycling rounds which were selected due to their location in proximity to the depot. The trial started on Thursday 5th February and concluded on Thursday 26th February which included four collections.

The trial replicated the approved scheme except for the charging for garden waste element which was not included. It was not seen as practical to set up a charging system for a four week trial and perhaps also unfair to place a charge on only a small proportion of residents. Garden waste collections are directly impacted by seasonal variations and therefore the tonnages of garden waste in February with no charging in place are not representative of the new scheme.

All households on the trial were delivered a leaflet two and half weeks before the start and another ten days before the start with the new containers required for the trial. The leaflets set out which containers to put out on each week and how to use the new scheme.

All households, had all materials cleared the week before the trial started, on their normal collection day. All materials were also collected again, on the last collection of the trial so more accurate tonnage figures could be recorded from the trial. Tonnage figures were also recorded on these routes before the trial so to give a comparison between the current and new scheme.

Upon completion of the trial the organic containers were collected and a survey was left to be completed. Not all organic containers were left out and so some were still being removed the following week. The survey, which was delivered to all households, has a return by date of the 18th March. Initial return rates appear to be high but no analysis of the returns has yet been undertaken. Households on the trial have kept their new green recycling box and asked to continue to recycle mixed plastics and cardboard. This will give even more operational information and will remove the need to collect the boxes only to potentially deliver them again in June.

The trial has helped to establish the best way to roll out the scheme to residents and receive customer feedback on the scheme. Critical operational information has also been gained on vehicles, participation rates, call volumes and tonnages of material collected.

As with all trials the information is only a snapshot over a short period and rates/tonnages can vary from one area to another and from one season to another. The areas used are already good performing areas in regards to recycling and therefore tonnages cannot simply be multiplied out for an anticipated district wide performance.

Areas Included

Two existing recycling routes were included in the trial, one urban and one rural. The urban trial route included 729 properties in the Pinnex Moor area of Tiverton. Residents on this route currently have a brown bin for cardboard, garden and food waste, collected on the alternate week to landfill and fortnightly dry recycling from black boxes.

The rural trial route included 313 properties in Ash Thomas, Brithembottom and the outskirts of Butterleigh and Bickleigh. Residents on this route currently receive a weekly landfill and fortnightly dry recycling collections from black boxes.

Weights Collected

Table 1 and 2 below show the Kg's of material collected before and during the trial. The tonnages collected were averaged out per household per week. Therefore, if a collection was fortnightly the figure was divided by two to give comparable figures and thus why the same figure is used on some weeks.

The Week -1 collection included an extra collection of materials which collection cycle did not fall on that week. This was to ensure all households had no waste at the start of the trial. This does not seem to have been used by all households and therefore some of the figures highlighted in yellow appear to have been effected and may have affected overall rates slightly.

Table 1 – Kgs of Material collected per week per household – Rural Round

<u>Week</u>	<u>Kgs Dry Recycling per HH/Week</u>	<u>Kgs Food Waste per HH/Week</u>	<u>Kgs Garden Waste per HH/Week</u>	<u>Kgs Organic Waste per HH/Week</u>	<u>Kgs Landfill per HH/Week</u>
-2 (pre trial)	2.55	n/a	n/a	n/a	Not Recorded
-1 (pre trial)	1.69	n/a	n/a	n/a	11.3
1	3.91	0.96	3.13	4.09	8.18
2	3.91	1.06	2.01	3.07	8.18
3	3.09	1.12	2.01	3.13	9.77
4	3.09	2.12	2.43	4.55	9.77

This shows an increase in dry recycling and new rates for organic material compared to pre-trial. The dry recycling weights have increased, likely due to the addition of cardboard and mixed plastics being collected. The organic waste, which was not collected in the rural areas before the trial also, seems to have been well diverted. These increases have impacted on the residual waste sent to landfill which is encouraging but it has also increased

the total tonnage of waste collected. This maybe due to garden waste, which could have been disposed of in a different way in rural areas prior to the trial but then collected by the Council as the it was free collection.

Table 2 – Kgs of Material collected per week per household – Urban Round

<u>Week</u>	<u>Kgs Dry Recycling per HH/Week</u>	<u>Kgs Food Waste per HH/Week</u>	<u>Kgs Garden Waste per HH/Week</u>	<u>Kgs Organic Waste per HH/Week</u>	<u>KGs Landfill per HH/Week</u>
-2 (pre trial)	2.30	n/a	n/a	5.00*	5.91
-1 (pre trial)	2.30	n/a	n/a	5.00*	3.29
1	3.62	1.96	2.33	4.29	7.16
2	3.26	1.84	2.33	4.17	5.43
3	3.26	2.08	2.68	4.76	5.43
4	4.33	2.56	2.68	5.24	4.14

* Included cardboard

The urban round also shows an increase in dry recycling, likely from the addition of mixed plastic and cardboard being collected. This could account for the reduction in the organic waste collected as cardboard, which was included in the organic waste stream before the trial in the brown bin scheme. Again the food waste recycling is of a high level and the overall recycling rate appears to have increased.

Landfill does appear to be much higher in the rural areas. This may be due to these residents not being on the current organic scheme and currently receiving weekly landfill collections but all figures require more analysis.

The Kgs per household per week for landfill from Q4 in 2013/14 was 9.42 for the district as a comparison figure. The rate for the trial overall was 6.57

The Kgs per household per week for dry recycling from Q4 in 2013/14 was 2.72 for the district as a comparison figure. The rate for the trial overall was 3.58.

Table 3 shows some comparisons for organic waste from other authorities. The rate for the trial overall was 1.87 for food waste and 2.47 for garden waste.

Table 3: Kgs of Organic Material collected per week per household from other authorities

Kgs per HH/Week	South Somerset	Mendip	West Devon	Tewkesbury	Sedgemoor
Garden	0.88	1.21	2.57	2.48	1.46
Food	1.5	1.21	1.44	1.52	1.59

Recycling Rate

The overall Rate for recycling in the rural trial area was 44.53%.

The overall Rate for recycling in the urban trial area was 59.77%.

Participation

Table 4: Trial Participation

Week	Round	Collection	No. Households with Container Out	Participation Rate %
1	Urban	Food/Recycling (Caddy)	360	49.4
2	Urban	Food/Garden (Caddy)	312	42.8
3	Urban	Food/Recycling (Caddy)	374	51.3
4	Urban	Food/Garden (Caddy)	407	55.8

1	Urban	Food/Recycling (Boxes)	389	53.4
3	Urban	Food/Recycling (Boxes)	449	61.6
4	Urban	Food/Recycling (Boxes)	406	55.7

2	Urban	Food/Garden (Wheeled Bin)	278	38.1
4	Urban	Food/Garden (Wheeled Bin)	204	28.0

1	Urban	Landfill	654	89.7
3	Urban	Landfill	694	95.2
4	Urban	Landfill	386	52.9

1	Rural	Food/Garden (Caddy)	80	25.6
2	Rural	Food/Recycling (Caddy)	90	28.8
3	Rural	Food/Garden (Caddy)	91	29.0
4	Rural	Food/Recycling (Caddy)	102	32.6

2	Rural	Food/Recycling (Boxes)	171	54.6
4	Rural	Food/Recycling (Boxes)	176	56.2

1	Rural	Food/Garden (Wheeled Bin)	41	13.0
3	Rural	Food/Garden (Wheeled Bin)	52	16.0
4	Rural	Garden (Wheeled Bin)	37	11.8

2	Rural	Landfill	277	72.5
4	Rural	Landfill	219	69.9

Food Waste Participation - The participation shows, as would be expected that as the trial went on participation increased as residents became use to the scheme. Food waste increased from 49% to 56% in the urban area and 26% to 33% in the rural. The levels of participation in the organic collections is expected to be higher in urban areas as they have been recycling this material for 10 years but also habits for disposal of food waste are expected to be different in the rural areas.

Dry Recycling Participation - The level of participation on dry recycling remained fairly similar in the mid 50% range. The scheme is well established and the tonnages have shown increased material collected from those participating.

Garden Waste Participation - There was no obvious trend and as stated these collections are affected by the season and will be chargeable in the future so participation is not that good an indication for the new scheme.

Landfill Participation - Despite collections being fortnightly the participation does seem to have reduced as the trial continued. This could be due to reduced volumes of waste being created due to increased recycling on the trial.

Customer Contact Centre

The Contact Centre staff kept records of the number of calls received and what they related to. These are shown in the tables below. The numbers of calls were considered low especially as there was a very small amount of promotion used for the trial so not to confuse residents not. The trial also required a change to the collection cycle which would normally generate additional calls. This perhaps means the two leaflets did answer a large number of the issues/questions residents had. A public roadshow was also held before the start of the trial which was busy but mainly positive.

The issue which needs to be addressed prior to roll out is why over half the calls could not be dealt with by the Contact Centre and had to be passed onto the Refuse Department.

More training on the scheme is perhaps needed for staff but three briefing sessions were undertaken prior to the scheme.

Table 5: Calls Taken

Total Calls Received	Call Passed to Department	Department Asked to Call Back	Dealt with by Customer First
121	11	64	46

Table 6: Types of call

Lost bin	1	Material collected	11	Lost leaflet	4	Other	39
Collection day	3	Assisted	3	Lid requests	5		
Missed collection	16	Did not receive leaflet or bin	31	Not taking part	8		

The Head of Customer First will use this information to establish staffing needs during the roll outs. Extra calls would be expected on the roll out compared to the trial as people would also have to set up garden waste collection scheme payments.

Conclusions

The trial shows encouraging results and it does appear that resident's participation was good and the scheme showed increases in recycling rates for both the rural and urban areas. However again this is a good performing area and only a small sample over a short period of time and therefore caution must be used when drawing conclusions from the trial information at this stage.

The tonnage information gained can now be used to help select vehicles and write specifications, when combined with further vehicle trials to ensure access issues can be addressed. The tonnage figures for specific materials can now be used to review budgets to ensure they are realistic.

The diversion figures will aid discussions held with DCC and their treatment contractors. This will also help agree a cost savings mechanism for treatment cost savings gained by the County Council by the new scheme.

The trial appears to have been successful and the new recycling vehicles have been delivered and working for two months. This means that an earlier roll out of the changes to the dry recycling scheme is now operationally deliverable could start in June. This will allow more time for residents to get use to these changes before the changes to the organic

scheme are introduced. To clarify all residents could receive an additional green recycling box and will start to recycle mixed plastics and cardboard from the box scheme in phase one starting in June.

This will mean that the Organic scheme changes will still be rolled out post summer after funding agreements with DCC has been established and the new vehicles have been delivered for phase two of the scheme. This is still anticipated to be October.

It is also proposed that at the next meeting a more detailed report is presented on the trial with further analysis of tonnage figures, analysis of the customer feedback survey and an updated budget presented.

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