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**Manchester City Council  
Report for Resolution**

**Report to:** Neighbourhoods and Environment Scrutiny Committee – 21  
June 2016  
Executive – 29 June 2016

**Subject:** Waste Collection and Disposal Savings

**Report of:** Deputy Chief Executive, (Growth and Neighbourhoods) and the  
Director of Neighbourhoods

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### **Summary**

The City spent £36 million on waste disposal in 2015/16 and this figure is expected to rise over the next few years due to inflationary pressures on the Greater Manchester Waste Disposal Authority, population growth forecasts and a levelling out of the City's recycling rate. The City collects approximately 171,000 tonnes of waste each year with only 32% recycled. Whilst this figure is much higher than the 18.8% rate in 2009/10 prior to the change to alternate weekly collections, it is the lowest rate amongst Greater Manchester authorities, which means the City has the highest disposal costs.

The City has made improvements in performance over the last 5 years. In 2009/10 the city's recycling rate was 19%; in 13/14 the rate was 34.9%. However, rates have levelled out and slightly dipped over the last few years. The improvement and levelling off of Manchester's recycling rate broadly mirrors the national picture.

The City has a full year savings target of £2.4 million in reduced disposal costs in 2016/17. The planned savings against the disposal budget will require a reduction of around 7,000 tonnes of residual waste, which equates to a reduction or diversion in residual waste of around 7%. These assumptions are based upon all other Waste Authorities waste levels remaining unchanged.

### **Recommendations**

The Executive is recommended to approve:

- the introduction of a 140 litre wheeled bin for residual waste to be collected on a fortnightly basis from August 2016.
- the phased introduction from February 2017 of a reduction of residual waste capacity for apartment blocks to meet the recycling levels expected from 4 bin households.
- that residents in terraced housing with container collections can revert to wheeled bin collections should they demonstrate that they will collectively present and remove recycling bins on collection days
- the removal of Bring Sites with immediate effect

And notes:

- the funding arrangements of the GMWDA and the proposed review of the contract and the inter authority agreement for Greater Manchester Waste Disposal Authority

**Wards Affected: All**

<b>Manchester Strategy outcomes</b>	<b>Summary of the contribution to the strategy</b>
A thriving and sustainable city: supporting a diverse and distinctive economy that creates jobs and opportunities	
A highly skilled city: world class and home grown talent sustaining the city's economic success	
A progressive and equitable city: making a positive contribution by unlocking the potential of our communities	
A liveable and low carbon city: a destination of choice to live, visit, work	Increasing recycling rates across the city will reduce Manchester's carbon footprint.
A connected city: world class infrastructure and connectivity to drive growth	

**Full details are in the body of the report, along with any implications for:**

- Equal Opportunities Policy
- Risk Management
- Legal Considerations

**Financial Consequences – Revenue**

The total expected revenue investment in the service change proposal would be £686,000, split as follows:-

- The engagement of up to an additional 7 staff in the contact centre from July to October to meet expected increase in demand, costing £61,000
- The engagement support provided by 20 canvassers over 26 weeks will cost in the region of £200,000.
- Three additional recycling rounds required to meet the forecast increased presentation rates and the accompanying increased management of the exchange programme for Biffa will cost an estimated £300,000 until March 2017.

- The management and coordination of the overall project plus arranging the warehousing and delivery of additional recycling bins will cost an additional £100,000 as a one off cost.
- The extension of the weekly organic collection service for 4 weeks at £25,000

These one off costs will be funded from earmarked reserves to support waste collections.

To complement the service change, the City Council has identified the need for resources to tackle environmental issues across the City. The engagement of 6 officers to provide support for compliance and enforcement activity would cost £168,111 per annum. It is proposed that these costs are met from the budget allocated for environmental improvements in the 2016/17 budget.

### **Financial Consequences – Capital**

There is a capital investment of £1.72m required for the cost of replacement residual bins which is incorporated into the agreed capital programme for 2016/17.

#### **Contact Officers:**

Name: Fiona Worrall  
Position: Director of Neighbourhoods  
Telephone: 0161 234 3926  
E-mail: f.worrall@manchester.gov.uk

Name: Mark Glynn  
Position: Strategic Lead, Waste and Recycling  
Telephone: 0161 234 1061  
E-mail: m.glynn@manchester.gov.uk

#### **Background documents (available for public inspection):**

None

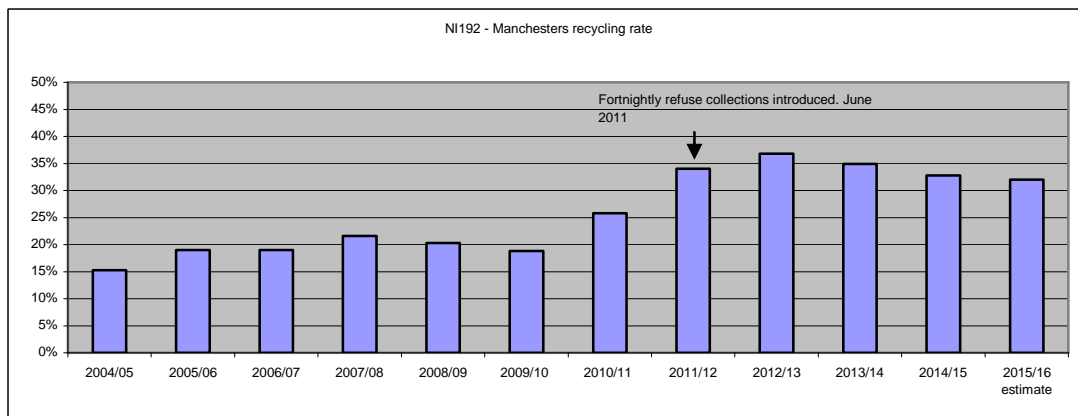
## Part 1 Performance and Benchmarking

### 1. Manchester's Disposal Cost Pressures

The City has made improvements in performance over the last 5 years. In 2009/10 the city's recycling rate was 19%; in 13/14 the rate was 34.9%. However, rates have levelled out and slightly dipped over the last few years. The improvement and levelling off of Manchester's recycling rate broadly mirrors the national picture.

When Manchester changed from weekly to fortnightly collections of 240 litre refuse bins in 2011 this led to a decrease in refuse of 23,535 tonnes (18.7%) between 2010/11 and 2012/13 (full years either side of the change year). This impressive rate of increase reached a plateau as the 'easier wins' were secured. Manchester is now starting to see locally (as is the trend nationally) a levelling off in performance. Whilst the reported figures have dipped over the past three years, this is due to recording and external factors rather than a significant change in local behaviour.

**Graph 1 Manchester's Recycling Rate**



The City actually collects more recycling tonnage than in 2011/12. The recycling collected from households has gone up during each of the past 4 years. Table 4 shows that tonnage collected has increased from **48,459 to 53,392 - a 10.2% increase in collection rates.**

**Table 1 - Recycling Collected from Households**

Year	2011/12	2012/13	2013/14	2014/15	2015/16
<b>Tonnage</b>	48,459	50,760	52,433	52,758	53,392

There are two main reasons that the reported recycling rate has fallen:

- **Recycling Contamination** – Viridor Lang have rejected significantly more recycling at the waste disposal plants over the past two years than in previous years. This has seen a reduction of the recycling figure by approximately 1.5%. There is significant national pressure on increasing the quality of recycling product due to falling demand. This may be a factor that has seen the plants decrease their tolerance of what is acceptable or an increase of actual contamination of household bins.
- **Data recording** – the City altered the measurements of recycling collected from street sweeping waste in November 2013 to comply with DEFRA requirements.

This alteration in the recording methodology was later than most authorities and has resulted in an annual decrease of approximately 4%.

The City's objective to increase recycling is based on a range of activities:

- a) The implementation of the **new integrated waste collection and street cleansing contract** which will bring together the responsibility for the operational activity relating to domestic and street waste.
- b) A refreshed strategy based on the **3 Es - Educate, Engage and Enforce** to reduce levels of residual waste and increase recycling. This includes the roll out of the revised service standards introduced in April 2015, building on the current behaviour change activity focussed on key issues, a refreshed and energised communication campaign and the development of a Manchester Incentive scheme funded through a targeted DCLG grant.
- c) A more **targeted and intelligence led approach to activity** focussed on changing residents behaviour using clear evaluation methodology to understand what works and can be replicated. Two examples of this are:

**(i) Understanding the impact of the City's stock profile** – the demographic and stock profile in Manchester limits increases in recycling within the City and is one reason we have not kept pace with other boroughs. The major difference is the number of properties where communal waste collections take place (see Table 2). The table below shows that 30% of the City's stock has its waste collected from communal facilities and highlights the level of residual waste from each property type. If Manchester was to introduce a service change to reduce refuse capacity it is likely to have less of an impact than in other GM authorities. This means that any reduction in refuse capacity for households with their own bins will only affect 70% of properties in Manchester. In addition, the City is much less suburban than the other authorities in Greater Manchester which leads to less garden waste and a lower recycling rate.

	Household numbers 14/15	% of housing	Refuse produced 14/15	% of refuse produced	kg/h/yr Refuse
4 bin households	156975	70%	68453	70%	436.076
Passageway container	15733	7%	13160	13%	836.458
Apartments	52100	23%	16422	17%	315.202
<b>Total</b>	<b>224808</b>		<b>98035</b>		<b>436.083</b>

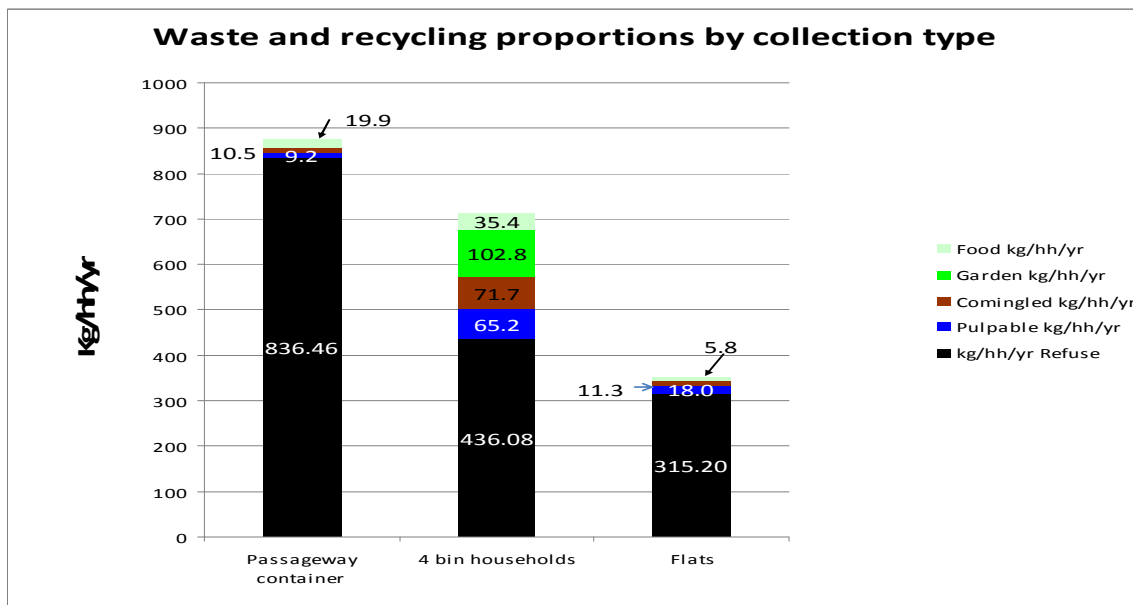
Biffa have collected data at a property type level, which demonstrates the difference in disposal weights between the three types of waste collection in the city, which very clearly demonstrates the weaker performance for communal property types. The graphs below summarise this information:

- 4 bin households
- Passageway Containers
- Apartments

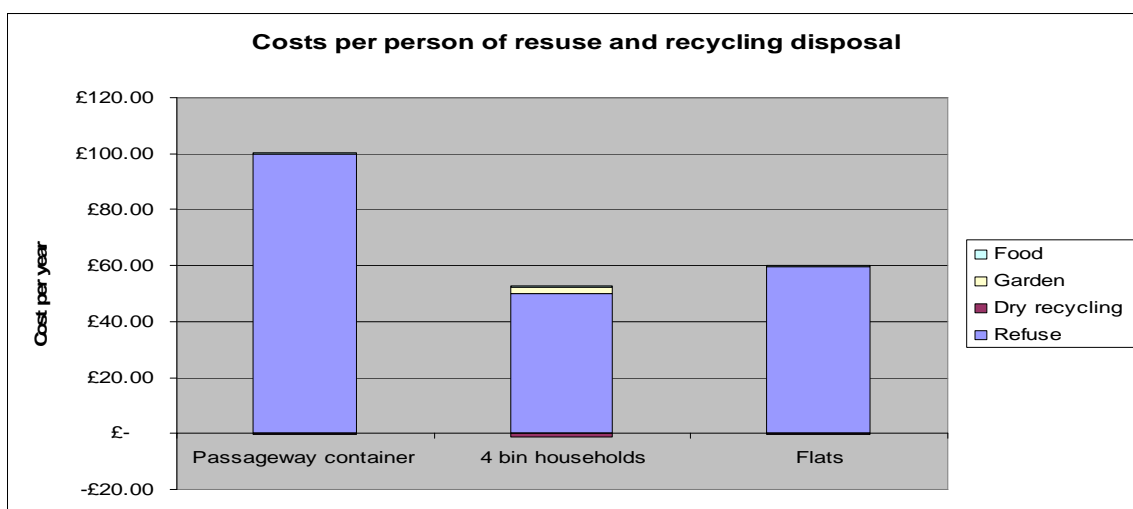
Currently apartments are estimated to recycle 10%<sup>1</sup> of their waste whereas households with their own bins recycle 38% (see graphs 2-4). Whilst the cost of waste disposal is lower per household, this is because apartment households are smaller on average. If each apartment household recycled at similar levels as per the 4 bin households current levels, the City could save in the region of £2 million per year in disposal costs.

Similarly, terrace properties with containerised collections recycle very little. The recent analysis of container collections found that approximately 10% of waste is recycled.

**Graph 2 – Waste Weights by Property Type**

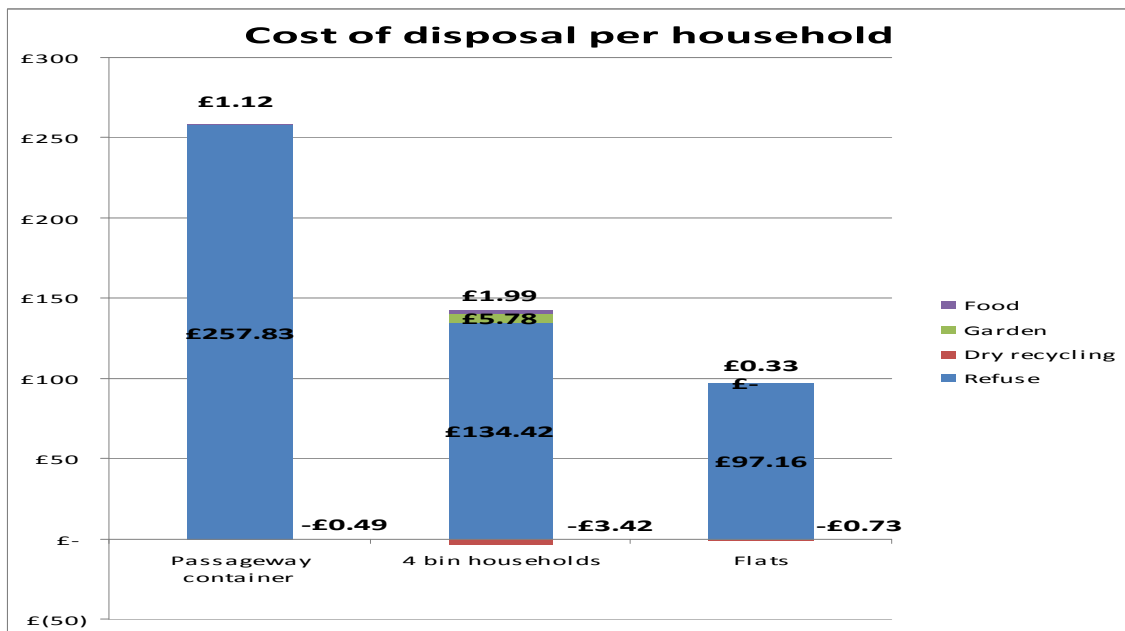


**Graph 3 – Waste Cost per Person**



<sup>1</sup> High rise recycling figures are based on 2 weeks worth of data collected in early September 2015. This data was collected without mixing high rise and bringsite services or 4 bin organic services. See appendix 1

**Graph 4 – Waste Costs by Property Type**



**(ii) Food Recycling** - GMWDA undertook compositional studies in 2011 and 2014 which reviewed what waste was disposed of in which bins. In terms of recyclable waste, there was more paper, glass bottles or jars, plastic and cans recycled in the right bins than disposed of in the residual waste stream but more food was put in the residual waste stream than was put in the green bin / caddy. In fact, between 25% and 33% of weight in black bins was organic food waste.

It is very clear from this information that many people are recycling and yet do not recycle food. On average, 3.5 times more food is disposed of in the residual bin than through the green bin and caddy system. This costs the City Council over £10m p.a.

A variety of reasons are given as to why people do not recycle food. Workshops with local residents identified a range of factors, including space in the kitchen, smells from the bins and a general queasiness with regard to the nature of the waste. They have also identified that there is confusion regarding why food recycling is important and what happens to the food collected. Members will have noted recent campaigns to promote food recycling that have attempted to address resident concerns. Whilst the campaign has been well received and seen a significant increase in caddy and liner requests, officers are clear that regular communications are required to deliver a sustained change in behaviour.

## **2 . National Context**

There are no national targets for recycling in England and legislative and fiscal policies designed to promote recycling have been downgraded or removed without replacements. The landfill tax escalator, which saw the tax per tonne increase by £8 per year until 2014, has been downgraded and is now set at RPI. In addition, the Landfill Allowance Trading Scheme (LATS) has been abolished. LATS were designed to limit local authorities land fill capacity and encourage them to work collaboratively to manage their annual allowances. It is perhaps unsurprising that the

national recycling levels across England mirror this position, as they have in the last 2/3 years started to level off after 10 years of significant growth.

**Table 3 – English Local Authorities Recycling Rates  
(DEFRA November 2014)**

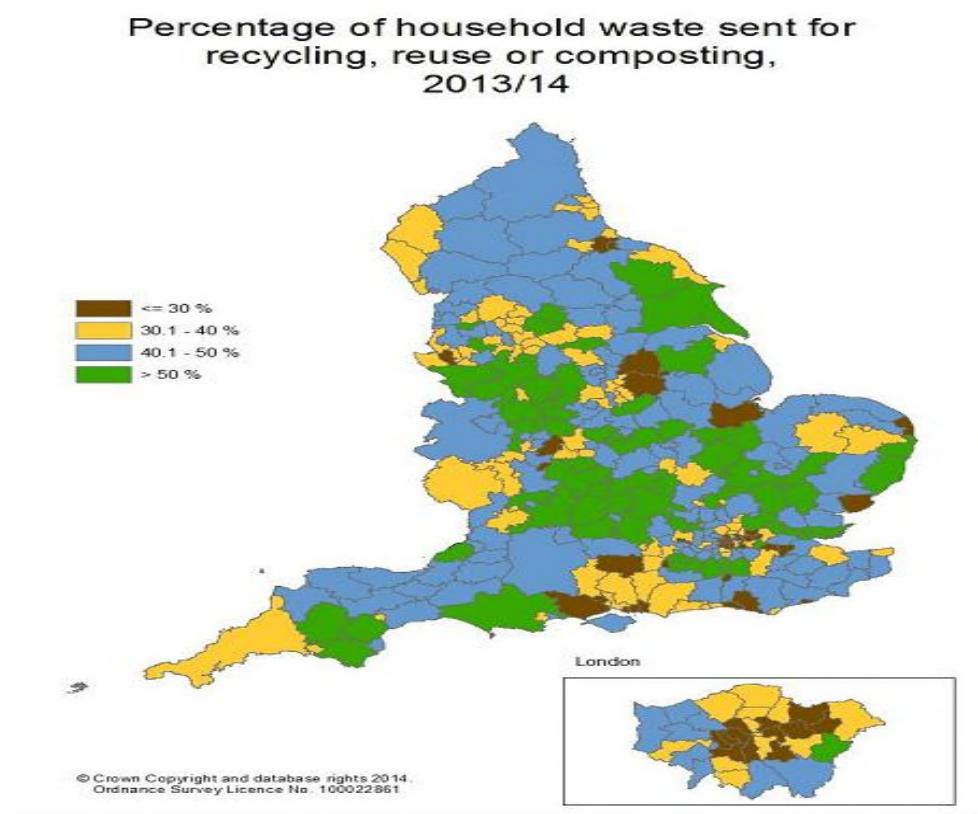
Financial Year	Recycling Rate
2010/11	41.2%
2011/12	43.3%
2012/13	44.1%
2013/14	44.2%
2014/15	44.8%

At Local Authority level, individual recycling rates ranged from 18% to 66%. There is a tendency for recycling rates to be similar in adjacent areas although high and low recycling rates are spread across England. Figure 1 shows the geographic distribution of recycling rates in 2013/14. Newham London Borough Council and Lewisham London Borough Council had the lowest 'household waste' recycling rates at 18% in 2013/14. South Oxfordshire District Council had the highest 'household waste' recycling rate at 66%, with over 55% of their recycling comprising of green/organic waste. Rochford District Council and The Vale of White Horse District Council both achieved 'household waste' recycling rates of 65%.

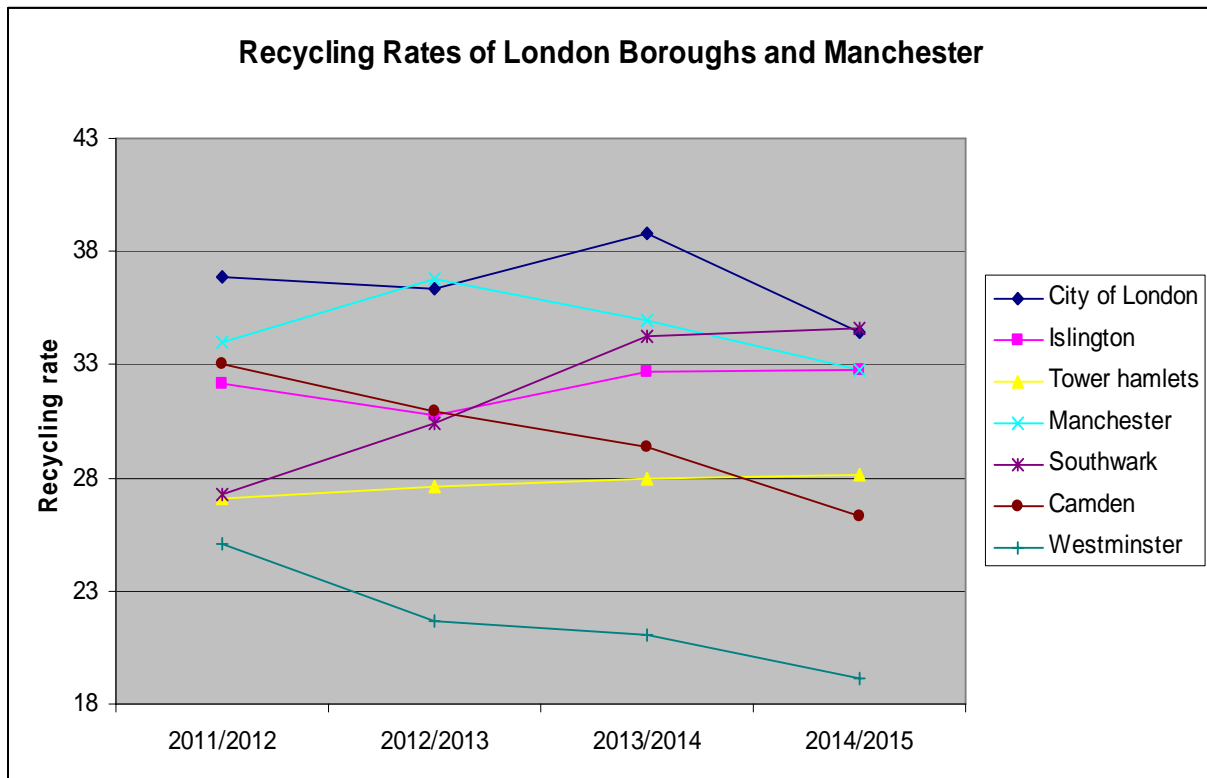
Manchester's recycling rate is comparable to core cities and London boroughs, where demographics and urban setting most similar to Manchester. Officers liaise regularly with colleagues from the core cities and other authorities to review best practice and consider how best this could be applied in a Manchester setting.



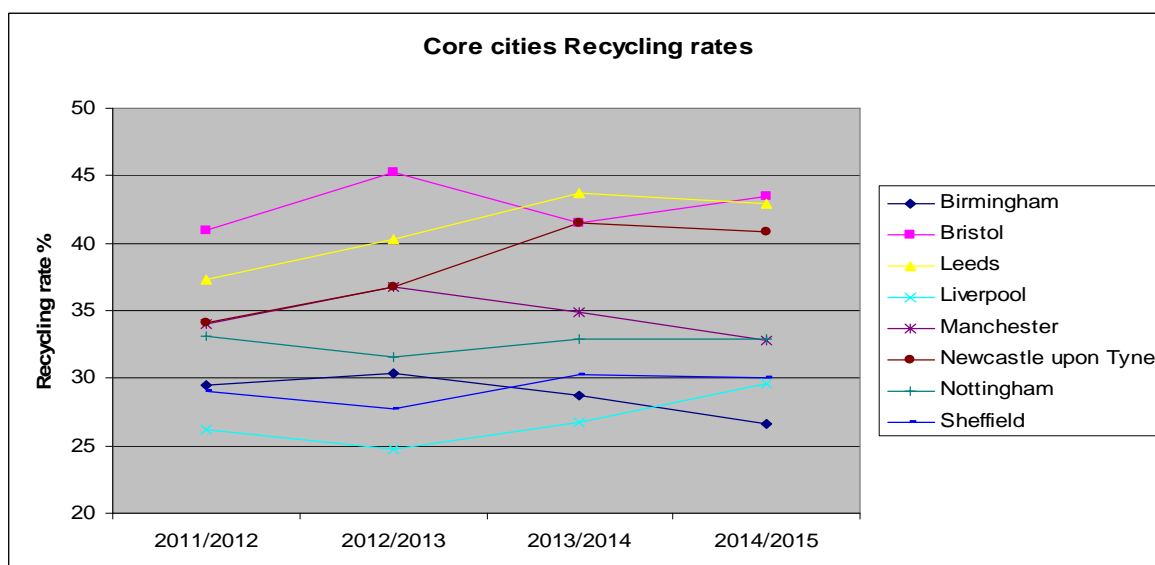
**Figure 1 English Recycling Rates**



**Graph 5 Recycling Rates of London Boroughs and Manchester**



**Graph 6 Recycling Rates of Core Cities including Manchester**



### **3. Greater Manchester Context**

Manchester disposes of waste through a PFI contract between the Greater Manchester Waste Disposal Authority (GMWDA) and the contractor, Viridor Laing. All Greater Manchester Authorities, with the exception of Wigan, are part of the GMWDA. The cost of waste disposal and recycling is divided between Greater Manchester authorities via the waste disposal levy. There are a series of upward pressures faced by the levy. The total cost of the levy is projected to increase by 9.6% and 7.6% in 17/18 and 18/19. Some of these upward pressures are the nature of the contract, with the funding profile reflecting capital investment, whilst others are caused by the need to divert waste whilst remediation is taking place of Anaerobic Digesters, insurance premium tax changes and the removal of Climate Change levy for renewable electricity. Manchester's levy will increase from £35.02m in 15/16 to £41.29m in 18/19 if our proportion of Greater Manchester waste remained the same. However, Manchester's share of the total cost will also increase due to the nature of the Inter Authority Agreement. In essence, the overwhelming majority of the levy operates as a zero sum gain with the total guaranteed to Viridor Lang being shared amongst the 9 waste authorities. As less refuse is put through the Greater Manchester Waste Disposal Authority (GMWDA) the price per tonne will increase as finance and operating costs are split over fewer tonnes. As other Greater Manchester authorities introduce capacity reduction schemes for refuse such as 3 weekly collections or smaller refuse bins, the share of the levy that Manchester pays will increase. This means that the recent changes to residual waste collections across GM – where most have now or are about to reduce residual capacity - will have created a significant short term advantage to the authorities in question but will force other authorities to follow and eventually erode the vast majority of any saving.

In 2009/10 Manchester paid £19.66m towards the levy but by 15/16 this had risen to £35.02m. As other authorities such as Trafford and Stockport gave residents 140 litre bins for refuse when collections started changing to fortnightly 5 years ago,

these authorities managed to reduce their share of the levy. In 14/15 Bury restricted refuse capacity by reducing collection frequency of the 240 litre refuse bin to once every 3 weeks. Each change has increased Manchester's proportion of the levy. Salford, Tameside and Rochdale have all reduced residual tonnages with the main impact due to feed through during this financial year. Bolton are implementing changes early in this financial year. If the City doesn't follow suit then the cost of the levy to Manchester is expected to increase by 2% of the total levy to 23.7% of the total Greater Manchester levy cost in 17/18 compared to 19% of the total levy cost in 2012/13.

It is estimated that these two upward pressures will result in Manchester paying in excess of £45m in 18/19 if no changes are made to the collection service.

**Table 4 Manchester recycling rate and levy charge**

	NI192- recycling rate	Levy £m
2009/10	18.82%	£19,656,000
2010/11	25.80%	£21,591,810
2011/12	34%	£23,538,300
2012/13	36.80%	£28,064,191
2013/14	34.90%	£33,377,913
2014/15	32.80%	£34,479,412
2015/16 *	32%	£35,020,000

\*Estimated figure as final position for 15/16 not yet confirmed

**Table 5 – 2014/15 Provisional Recycling Levels**

District	% HH waste	
Trafford	61.90%	Already reduced residual capacity
Stockport	60.66%	
Bury	46.57%	
Salford	41.16%	Changes made during 15/16
Tameside	40.78%	
Bolton	38.91%	In process of reducing residual capacity
Oldham	37.12%	
Rochdale	33.39%	
Manchester	32.81%	
GMWDA	45.10%	

A comprehensive review of the PFI contract and inter authority agreement is ongoing and due to conclude in September 2016. The review is also assessing optimisation of the existing plant and the financing of the PFI. The Executive Member with responsibility for waste and recycling is part of the Sub-Group with responsibility for the review.

#### **4 . Impact of Interventions to Date**

In October 2014, Members endorsed a new approach to communications. Officers have subsequently undertaken a range of activities, including:

- Increased and improved general communications to explain to residents what is expected and the impact upon Manchester
- Local behaviour change pilots, e.g. Upping It in Rusholme where local residents are promoting increased recycling
- Pilots in Ancoats and Clayton, Gorton South, Higher Blackley and Northenden to reduce levels of side waste
- Working with registered providers
- Love Food Hate Waste Campaigns
- Enforcement of fly tipping, commercial waste fly tipping and side waste issues
- Continued work with schools to promote recycling, e.g. Little Hands

These campaigns are essential to promote and maintain the profile of recycling and provide reinforcement of the financial and environmental impact of waste disposal across the city. However, on their own they will not deliver the step change required. National and local evidence points to improvements in recycling levels following service changes that limit residual capacity rather than communication campaigns.

As shown by graph 1 earlier in the report, the major improvement in Manchester's recycling rate came when the residual collection was changed to fortnightly. Where the introduction of fortnightly waste collections had a direct impact on recycling rates in low rise properties, no significant equivalent changes to the apartment block service had been made. It was also recognised that residents within these buildings did not receive regular reminders about recycling (e.g. bin calendars etc) and so were likely to be less well informed about recycling provision within their buildings.

Since 2013 officers have focused on improving recycling in high rise apartment blocks through promoting recycling and ensuring each block had the correct facilities and communications to encourage residents to reduce waste. The initial project was funded by DCLG and aimed to improve the recycling rate in apartment blocks.

Bin stores in high rise apartment blocks vary in capacity and design and a 'one size fits all' strategy is not possible for these developments. Most high rise blocks have their waste and recycling collected from 1100L containers and officers had previously worked with high rise buildings to introduce recycling to most sites. However the number of recycling bins and ratio between residual and recycling containers depended very much on additional space available within bin stores and often resulted in low recycling bin provision. Those buildings with bin chutes also meant additional complexities as residents were often not able to access bin rooms, and would find disposal of refuse in chutes much easier and more accessible than using recycling facilities.

We have supplied more than 500 additional recycling containers and removed a similar number of residual containers. Despite these efforts, recycling levels in apartment blocks have not improved and remain at approximately 10%. This suggests that more fundamental change will be required in apartment blocks to deliver the step-change required in recycling rates.

Whilst the City has developed a comprehensive range of interventions designed to increase recycling it has been unable to assess where the interventions work and where not with any degree of certainty. The collected tonnage data is currently available at a round level and is insufficiently detailed to allow officers to interpret patterns and measure the collection rates at a local level. This has meant that it has been difficult to conclude the effectiveness of individual interventions although overall the recycling figures have not increased.

The Strategic Waste Team is responsible for developing a programme of intelligent and targeted behaviour change engagement and interventions. Biffa have recently introduced an ICT system that will provide more data regarding collections, e.g. presentation rates and side waste. This in turn will mean that officers will be able to identify opportunities and measure the impact of interventions. This will also mean that communications can be tailored to specific groups or locations and feedback to be more specific.

In addition, the City is investing in weighing equipment to be installed on 9 vehicles. This equipment will measure and record the weight of refuse collected from bins with an accuracy level of +/- 2kg. This is sufficiently accurate to provide good quality data for apartment blocks. This will allow the City to analyse data in a more granulated manner, enabling more effective analysis of trends and patterns. This will mean that information can be shared showing precisely how much waste is collected from each block and what level of recycling is undertaken.

Whilst improved information will assist in informing targeted education and enforcement interventions, a more significant change is required to deliver the step change needed to achieve the savings targets for disposal.

## **5. Analysis Summary**

There are four major areas that result in the City producing larger amounts of residual waste than other GM Waste Authorities and result in an increased levy. They are:

- **Passageway containers** – statistics demonstrate that 7% of properties in the city those that have communal containers generate 13% of the City's residual waste. A pro-rata level of waste disposal would result in a £2 million saving for the City;
- **Apartments** – whilst residual waste is lower per household than the City average, the smaller household size masks very poor recycling levels. If apartments recycled 40% of their waste this would save the City in the region of £2 million;
- **Food waste** – 3.5 times more food waste is disposed of in residual bins than in the green bins. Food waste makes up a large percentage of the residual waste stream as set out earlier in the report. If all residents recycled all of their food waste, this could save approximately £10m. Reducing refuse capacity should encourage residents to make use of their recycling facilities in order to dispose of their waste properly;
- **Greater residual bin capacity** - other GM authorities have reduced are have plans to reduce their residual waste capacity to levels significantly lower than Manchester's, resulting in lower residual waste levels.

## **6. Recommended Approach**

It is recommended that the City adopts a 3 strand approach to waste and recycling.

1. Continue with current approach to Educate, Engage and Enforce on disposal and recycling collections. The introduction by Biffa of an improved ICT system and weighing equipment for vehicles that collect from apartment blocks will mean this can be achieved in a more granulated and intelligent manner, providing communications and engagement opportunities that appeal to different sectors of the community and targeting enforcement in those areas where issues are the greatest. A main strand of this work will be to continue to develop a more targeted approach to food recycling, establishing the barriers and developing approaches and messages to overcome them. In addition, the additional Biffa flytipping team and the Neighbourhoods Service Compliance Teams are targeting investigations and enforcement on those passageways where there is a persistent problem with fly tipping.
2. Work with GMWDA to develop a collaborative approach to achieving the conurbation's long term circular economy aims. It is important that the GM authorities continue to work together to meet the needs of GM, optimising the collection regimes to minimise the collective disposal costs and realise the value of recycling streams. GMWDA will need to continue to lobby for legislative and financial policy changes that will drive England towards 50% recycling and meet the EU targets. These changes should increase the attractiveness of GM's spare capacity to other waste authorities and will generate additional income.
3. Introduce changes to the collection arrangements to reduce the residual waste capacity and maximise the food collection regime in order to deliver a step change to the city's recycling levels and to reduce the cost of disposal. This will require significant changes to the collection service undertaken for 4 bin households and for apartments. These changes are set out in part 2 of the report.

## **Proposed Service Changes**

### **7. Introducing a 140 litre wheeled bin**

It is proposed that the City swaps the current 240 litre black bin for a 140 litre grey bin. It is proposed that this change involves replacing all the current black bins with the smaller versions. All other bins would remain unaltered and the collection days would be at the same frequency as now. This would reduce the weekly residual capacity to 70 litres per week which would be in line with 7 of the other 8 GMWDA authorities who either collect 70 or 80 litres of residual waste per week.

It is clear from the composition analysis undertaken in 2011 that if residents recycled at a reasonably achievable rate there is sufficient residual waste capacity in a 140 litre bin. Clearly, officers would need to develop a detailed programme of communications and support for residents in order that any changes are introduced as smoothly as possible. Biffa would be expected to adopt a flexible approach during the implementation to ensure the streets remain clean through the transition period. To generate the anticipated savings, the City would need to follow up the service

change with targeted activity to ensure that residents are using their recycling facilities and are not over-filling the smaller bins or leaving side waste. Officers would initially provide educational support where these problems occur, but would need to escalate enforcement action where the problems persist or are serious in nature.

It should be noted that there will be an increase in collection costs during 16/17, as increased weight and presentation rates of recycling will require 3 additional rounds until March 2017. These additional costs are anticipated to be temporary costs as once behaviour change habits are clear a rebalancing process will take place to optimise the efficiency of the service. This will take place in early 2017 ahead of the new financial year and is likely to result in changes to the days of some collections.

## **8. Capacity Levels**

The current and proposed household waste disposal capacity levels are shown in the tables below. The overall waste and recycling capacity would decrease by 10% in the summer and 13% in the winter for residents who do not wish to increase their recycling levels. The most significant change is in residual capacity where the current 240 litre bin collected fortnightly gives a weekly average capacity of 120 litres and a 140 litre bin would have a capacity of 70 litres a week. In fact, overall capacity will remain higher than total capacity in 2002. It is important to note that all communications will invite residents to increase recycling capacity should they wish. This increases total capacity for most households.

**Table 2: Household weekly bin capacity (Summer) – litres (with proposal showing increased capacity should residents choose larger recycling bins)**

	Current	Proposal	% Change
<b>RESIDUAL</b>	<b>120</b>	<b>70</b>	<b>-42%</b>
Garden / food	240	240	No Change
Paper / card	70	70 or 120	No Change or increase if resident chooses
Glass / plastic bottles / cans	70	70 or 120	No Change or increase if resident chooses
<b>RECYCLATE</b>	<b>380</b>	<b>380 or 480</b>	No Change or increase if resident chooses
<b>TOTAL</b>	<b>500</b>	<b>450 or 550</b>	<b>-10% or +10%</b>

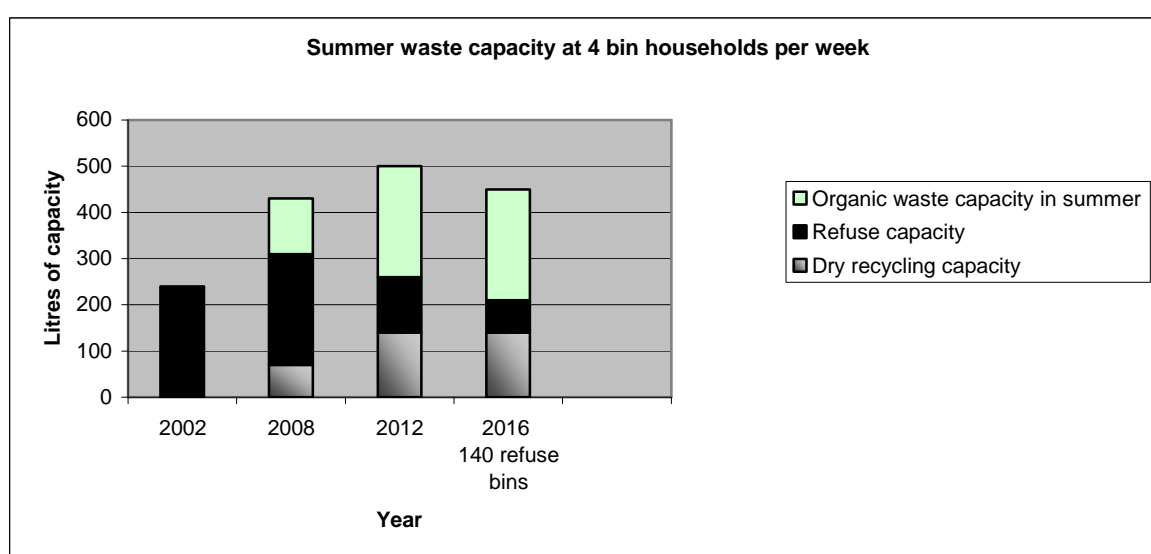
**Table 3: Household weekly bin capacity (Winter) – litres (with proposal showing increased capacity should residents choose larger recycling bins)**

	Current	Proposal	% Change
<b>RESIDUAL</b>	<b>120</b>	<b>70</b>	<b>-42%</b>
Garden / food	120	120	No Change
Paper / card	70	70 or 120	No Change or increase if resident chooses

Glass / plastic bottles / cans	70	70 or 120	No Change or increase if resident chooses
<b>RECYCLATE</b>	<b>260</b>	<b>260 or 360</b>	<b>No Change</b>
<b>TOTAL</b>	<b>380</b>	<b>330 or 430</b>	<b>-13% or +13%</b>

Analysis of the contents of black residual waste bins across Manchester in both 2011 and 2014 showed that in excess of 50% of the contents should not have been in the black bin but should have been in the blue, brown or green recycling bins. This indicates that should residual waste capacity be reduced it would be possible for residents to recycle more and dispose adequately of their waste.

### Graph 2 – Summer Waste and Recycling Capacity



### 9. Analysis of the 4 Bin Household Proposals

An appraisal of the advantages and disadvantages of the proposal has been undertaken and is set out below.

#### Positives

- This is estimated to save MCC approximately 11,000 tonnes in 2016/17 based upon behaviour changes experienced elsewhere in GM and beyond.
- Everyone gets a new bin. Some of the refuse bins have been used since 1993 and will soon require replacement anyway.
- The change represents an opportunity to reset bins and ensure that unauthorised households with more than one bin only receive the one 140 litre bin.
- Existing collection rounds wouldn't need to change immediately and this could be rolled out steadily across the city focusing limited resources on a round by round basis to inform residents and get it right step by step. Once the additional levels of dry and organic recycling were confirmed all rounds for all waste streams could then be optimised.



- Communications with residents would be more straightforward as there are minimal changes to the collection regime. The rounds will be the same frequency as now and the sequence of collections will remain regular.
- The opportunity to tag bins means that the city council can look to activate the tags where there are persistent issues with bins being lost or stolen. The City currently spends in excess of £300,000 per year replacing bins.

#### Negatives

- The new residual bins will cost the City approximately £1.72m with a significant logistical exercise required.
- There will be a temporary increase in collection rounds for recycling during 2016/17 to facilitate the proposed changes. This will result in an increased cost of £300,000 for 16/17.

#### **Alternatives considered**

Officers have considered variations to the proposal. These alternatives were also analysed and the reasons for being discarded are set out below.

#### **Option 1 – Swap brown and black bins**

A variation to the proposal would be to swap bins, with for example the brown and black bins reversing. This would mean that residual waste could be collected from the brown bin and the black bins could be used for co-mingled recycling. This would clearly reduce the capital costs of new bins.

However, it would create some further disadvantages over and above those set out above for the proposed approach. There are some logistical issues to overcome with this arrangement. For instance, there are many parts of the City where brown and black bins are collected on separate weeks, meaning that there is never a time when both are presented together. The change of use of bins may lead to confusion, with embossed signage giving incorrect information to future residents. In addition, there is a significant but unknown number of properties with multiple or larger brown bins. These would have to be identified and removed to avoid additional residual capacity.

#### **Option 2 – Existing bin remains but collections on three-weekly cycle**

A variation to the proposal would be change the black bin collection to three weekly. This would remove the need for any additional residual bins and therefore reduce capital costs.

However, the greater gap between collections could be perceived as a reduction in service and would create greater issues as the rhythm would be less intuitive with a three weekly cycle less easy to keep track of and the interval significantly larger if a resident misses a collection. The change would also require much greater disruption amongst residents with new rounds being required immediately.

Furthermore, the capacity reduction is not as large as residents would have 80 litres as opposed to 70 litres per week, which has resulted in lower savings where this option has been adopted in other authorities.

#### **Option 3 - Green Collections**

A further variation would be to increase the green recycling collections to weekly all year round. There is insufficient evidence to indicate whether increasing green collections will result in more food recycled. It is recommended that further work is undertaken to assess behaviour change and review the service once service change is in place and settled.

## **Conclusion**

On the basis of the above analysis, officers recommend that the proposed change is introduced on a phased basis with effect from August 2016. This option is considered most likely to deliver the short and medium term impact on recycling rates.

## **10. Changes to Apartment Waste Collections**

Officers have worked with apartment block management companies over the past three years to provide support and encourage recycling. Some blocks have embraced the arrangement, putting in place recycling facilities for residents and reducing residual collection capacity and supporting detailed communications to the residents which explain why recycling is being promoted and how best to use the facilities. There is limited evidence as to how much impact that this has had on reducing residual waste. When Biffa measured collection rates from apartments in autumn 2015, it was found that the recycling rate was 10%.

In effect, apartments have not been required to recycle and have had more residual waste capacity than needed and consequently there has been no consequence from low recycling levels. This is not the case for student blocks around the City where officers have worked with halls of residence to limit residual waste capacity. These halls are supported to increase recycling but, where residents choose not to or blocks are not designed with sufficient capacity, management companies of student blocks will be advised that the city will not collect additional waste. Where blocks do not comply, the City will use its existing Environmental Protection Act (1990) powers to oblige blocks to present waste in the appropriate containers.

It is proposed that the City limits residual waste capacity for each household in apartment blocks across the city on a comparable level to the limit for 4 bin households. Officers will calculate how much residual waste is reasonable to collect from each apartment block based upon residents being limited to a residual capacity level comparable to that expected of residents in 4 bin households. 4 bin households have an average of 2.69 people per household according to the census and will have a residual capacity of 70 litres per week. Student block households overwhelmingly consist of 1 person. The pro-rata residual capacity is calculated to 26 litres per week for student blocks. It is proposed that the approach in student halls is recalculated based upon the changes being made to 4 bin households and changes are introduced for September 2016.

Apartments have an average of 1.62 people per household which on a pro-rata basis equates to 42 litres per household. Management companies will be advised that the residual waste collections are to be reduced to meet this ceiling and that it is expected that apartment blocks increase their recycling levels. It is proposed that officers work with management companies and residents to ensure that recycling facilities are in place and residents are aware of the collection regime and supported to recycle effectively. Apartment blocks will be able to access food collections and a variety of communication materials designed to support recycling. The City Council will also promote blocks working with reputable textile recycling charities.

It will be important that any reduction in residual waste collections is undertaken in combination with robust recycling support in place and detailed communications from

the City Council explaining why changes have been brought about and what support is offered to help improve recycling facilities. Residents will have the opportunity to increase recycling levels. Where they do not and excess waste is generated, management companies will be expected to make their own removal arrangements and section 46 legal notices of the Environmental Protection Act (1990) will be used to prescribe how waste should be presented.

### **11. Passageway Container Collection Enforcement Activity**

It is not possible to undertake a similar residual capacity reduction exercise for passageway containers. The containers are often in public places and are often misused, with recycling levels poor due to fewer residents being engaged and others contaminating the facilities. Their communal nature means accountability for their use cannot be easily established.

The recent decision to introduce an additional resource for flytipping enforcement is enhancing the council's ability to identify households, businesses or particular containers or streets who misuse the facilities and take appropriate enforcement action.

The introduction of containers for passageways took place to reduce collection costs and because the wheeled bin collection service in these locations was perceived as problematic. A number of residents have contacted the city to suggest that the locations revert back to 4 bin collections. It is proposed that this can take place where it is clear that residents will take responsibility for presenting and removing their bins on collection day and for recycling effectively. Where residents request introducing individual bins and 75% of residents utilise the food recycling service for a sustained period it is proposed that a gradual introduction of recycling bins takes place.

### **12. Implementation of Changes**

It is recommended that a **phased implementation** of the 4 bin household changes takes place to ensure between August and October that there is sufficient capacity available to guide and support residents. This is set out in Appendix A. During this period all properties will have their residual bin replaced by a new 140 litre grey bin. The new bin will have a sticker with the property's address on. We will also be fitting tags to all new bins. The tags will not be activated initially. They could be used in neighbourhoods where there are high levels of lost or stolen bins in order to reduce the £300,000 per year bin replacement bill for the city. By fitting the bins with tags we are future proofing them at a cost that is far cheaper than retrofitting in the future.

An **intensive communication and engagement programme** will be delivered to explain why the City has had to take this decision, what the new service looks like and what is expected of residents. This will also require significant support from officers in Neighbourhoods and in the contact centre during the implementation.

In addition, the council will take a **robust approach to side waste and open bin lids**. The implementation of the new collection service is predicated upon decreasing residual waste and residents being forced to increase their recycling due to less

capacity. Clearly, this cannot be the case if residents are allowed to continue to dispose of excess residual waste. The Neighbourhood Scrutiny Committee considered a new approach to tackling side waste, with an incremental approach to communications providing residents with good quality communications explaining why the changes are required, overfull bins are left and residents informed that should there be a repeat the resident will be served an enforcement notice. Where a breach of the notice can be proven a fixed penalty notice of up to £80 can be served. Whilst residents will be supported and advised on how to increase recycling in the first instance, it is anticipated that there will be an increase in compliance and enforcement activity during this financial year. The increased workload will place an additional strain on the administrative and legal functions of the Neighbourhood Compliance Team. It is proposed that additional officer posts are created in the Compliance Team to support the service change.

The approaches set out in the implementation plan have also built upon the work undertaken by the Waste Task and Finish Group.

Changes to apartment collections will take place from February 2017 in order to allow a greater focus on the 4 bin households over the coming months.

### **13. Other Changes to the Contract - Removal of Bring Site Collections**

The original purpose of the Bring Site service was to provide residents the ability to recycle before the introduction of a full kerbside recycling service. The introduction of kerbside recycling therefore limited the practical need for Bring Sites in general. In the early stages of kerbside recycling the Bring Site service still provided residents with the ability to recycle additional materials that at the time still could not be accepted at the kerbside service e.g. card, plastic bottles. The introduction of wider range materials to the current kerbside recycling round now means that there are now no materials that are collected at Bring Sites that are not collected by the kerbside services. There has been no recycling tonnage collected at skip sites since July 2015 with all waste being treated as residual, due to high levels of contamination. It is clear that there is a combination of commercial waste and residents using the sites for additional capacity and that contamination levels are very high. All bring sites tonnages had fell from 3,152 (2007/8) to 616 (2013/14). As rounds are now blended into kerbside rounds we can no longer produce a precise figure due to decreases in the number of sites. Officers estimate that the current figure is probably now around 120 tonnes, although actual recycling will be lower due to the increased levels of contamination we have at skip sites.

Ending the current service is expected to save the City Council approximately £42,000 per annum in disposal costs with a saving of £28,000 for 2016/17 if the sites are closed with immediate effect.

### **14. Financial Implications**

The precise financial implications of the potential options around service change are difficult to quantify in advance due to the nature of the waste levy and the added variability of the impact decisions by the other 8 authorities will have on the overall levy.

The overall costs for the GMWDA are largely fixed, reductions in residual waste tonnages generate marginal savings. Material savings are only generated through either reducing the amount of material that goes to landfill or by selling the spare capacity.

The impact of service change on the levy will therefore be predominantly one of redistributing the costs of the GMWDA more evenly across the 9 authorities. The relative position of Manchester in respect of recycling performance will mean that it continues to pay a proportionately greater share of the levy under the current mechanism than would otherwise be the case.

A comparison of the overall waste tonnages would indicate that the 'premium' paid by Manchester in respect of the below average recycling performance currently equates to £4m per annum in relation to the levy. This premium will continue to grow both in proportion to the overall costs increases within GMWDA and with the disparity to recycling rates within the other 8 authorities if no action is taken.

The proposed service change will reduce the premium being paid by Manchester and lead to a rebalancing of the costs across the GM authorities. It is forecast that if the reductions in residual waste and increases in recycling occur as they have in other authorities that have implemented similar changes, then full year savings of £2.4m in disposal costs will be achieved. The actual savings to be achieved in 2016/17 based on the proposed implementation date is £1.1m.

The costs of waste disposal will however continue to rise on an annual basis after this rebalancing due to the increasing costs of the GMWDA in line with the PFI agreement.

There is a capital investment of £1.72m required for the cost of replacement residual bins which is incorporated into the agreed capital programme for 2016/17.

The total expected revenue investment in the service change proposal would be £686,000, split as follows:-

- The engagement of up to an additional 7 staff in the contact centre from July to October to meet expected increase in demand, costing £61,000
- The engagement support provided by 20 canvassers over 26 weeks will cost in the region of £200,000.
- Three additional recycling rounds required to meet the forecast increased presentation rates and the accompanying increased management of the exchange programme for Biffa will cost an estimated £300,000 until March 2017.
- The management and coordination of the overall project plus arranging the warehousing and delivery of additional recycling bins will cost an additional £100,000 as a one off cost.
- The extension of the weekly organic collection service for 4 weeks at £25,000

These one off costs will be funded from earmarked reserves to support waste collections.

To complement the service change, the City Council has identified the need for resources to tackle environmental issues across the City. The engagement of 6 officers to provide support for compliance and enforcement activity would cost £168,111 per annum. It is proposed that these costs are met from the budget allocated for environmental improvements in the 2016/17 budget.

## **APPENDIX A**

### **a. 4 Bin Household Changes**

#### **Pre-implementation (July)**

- A communications package will provide information to all residents promoting recycling, explaining the financial and environmental reasons for change and what support is available should they need it to increase their recycling. Leaflets and social media were used to ensure that every household received communications
- Detailed communications will be sent to residents in July to explain why the service change is needed, what residents are expected to do in terms of recycling and how the City Council can help if they want to know more about recycling or require additional recycling capacity
- An increase in demand for recycling bins, caddies and liners is expected during July as residents anticipate the changes that are to be made
- Additional capacity of an additional 7 officers for 18 weeks from 4th July until week commencing 31<sup>st</sup> October 2016 is created within the contact centre to manage expected increase in demand
- Further communications will be sent 2 weeks prior to the bin exchange reminding residents of the changes and explaining that their bin will be swapped on the next collection date
- From July, canvassers will visit properties in areas where there are greater risks of increases in side waste and non-compliance, providing information and support to residents. They will also visit areas where there is low participation in the current recycling service to encourage them to start recycling in advance of the changes, this will include issuing bins (where they don't currently have them or where residents want more capacity) and educating them about what can be recycled.
- Members, Registered providers and community groups will be briefed on the changes and the timetable for change and provided with a guidance pack to help inform residents.
- Audit all households who are currently on the approved additional bin list (currently approximately 5,000) and ensure that the household still requires the additional capacity because there are 6 or more people or they generate additional waste due to a medical reason **and** they are recycling to full capacity. Withdraw additional capacity where not needed.
- Continue to use enforcement powers for those households where there is an excess of residual waste or regular contaminated recycling with the current collection service and officers to follow the previously agreed enforcement procedure.

#### **Implementation for 4 bin households (August - October)**

The implementation programme for the 4 bin households will be rolled out over a 3 month period from August to October. This will allow us to change two rounds per day and will ensure changes are implemented prior to the commencement of the winter green schedule. It is proposed that the programme starts in the South of the

City in order to be able to remove bins from student households at the end of the academic year.

- Information confirming that the bins will be exchanged will be given two weeks beforehand. This will be in the form of a letter and sticker attached to the bin.
- Canvassers and officers will work alongside the exchange programme reinforcing messages and providing assistance where residents struggle to adapt.
- Regular updates will be provided to reinforce why the changes are being introduced. It will be sent to members, registered providers and community groups explaining the impact of the changes in terms of increased recycling and the financial saving to the city council.
- Officers will tackle those residents who do not comply with the new arrangements using the enforcement methods described above.

## **b. Apartment Changes**

### **Pre Implementation (July to January)**

- A communications package will provide information to all residents promoting recycling, explaining the financial and environmental benefits to the city and what support is available should they need it to increase their recycling. Leaflets and social media will be used to ensure that every household received communications
- Management companies will be contacted in July to September to explain that service change is intended to be introduced in the new year, that blocks need to significantly increase recycling and that officers will provide support and assistance to promote recycling in their blocks
- Detailed communications will be sent to residents to explain why the service change is needed, what residents are expected to do in terms of recycling and how the City Council can help if they want to know more about recycling or require additional recycling capacity
- An increase in demand for recycling bins, caddies and liners is expected from July onwards as blocks anticipate the changes that are to be made
- Additional recycling facilities will be available for apartment blocks, including food recycling containers
- Weighing equipment will be fitted to apartment collection vehicles which will allow individual block tonnages to be identified and analysed
- This will enable officers to target poorly performing blocks for change earlier in the programme
- Management companies will be contacted between November and January to advise when the new presentation requirements come into force.
- Information will be provided to management companies of apartment blocks on how they are performing and reinforcing the timescale for withdrawing some of the residual capacity
- Officers will promote textile recycling companies to all management agents.
- Apartment blocks will be expected to present waste in appropriate containers with informal warnings and existing legislative powers used where management companies do not take appropriate action



### **Implementation (February 17 – December 17)**

The implementation will be rolled out over an 11 month period as a bespoke programme is needed with individual blocks having different collection regimes due to historical and spatial reasons.

- A bespoke communication will be sent to apartment blocks giving notice as to when residual waste collections will be reduced.
- Residential Management Companies and apartment resident groups will be briefed on the changes and provided with a guidance pack to provide details and timetable
- Communications will be sent to residents as well as management agents
- Ongoing communications will be provided to blocks to advise on performance
- Officers will review the effectiveness of the block in managing the changes and provide advice and support to increase recycling where blocks are not managing to reduce residual waste.
- Officers will provide update to blocks on effectiveness of change and impact on tonnages.
- Where blocks fail to present their waste correctly collections will not be made and management companies will be expected to rectify this for the following collection, either through re-presenting or disposing of the waste
- Where blocks continue to fail to deal with their waste effectively, officers will consider whether enforcement is appropriate.