# **BUSINESS CASE**

Modernisation of Waste and Street Services

#### **Document Control**

Title	Waste Management 2016 Unique Identifier		WM2016
Programme	GAME 2		
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Project Manager	Sue Rouse		

#### **Purpose of Document**

- The Business Case is used to obtain commitment and approval for investment in business change, through rationale for the investment.
- The Business Case provides a framework for planning and management of the business change
- The ongoing viability of the project will be monitored against the Business Case.

#### **Approvals**

Position	Name	Date
Project Executive/Waste Modernisation Project Board	Lou Hayward	13 <sup>th</sup> October 2016
Portfolio Holder, Street Scene/Environment	Cllr Michael Leaves	20 <sup>th</sup> October 2016
Cabinet	Lou Hayward	8 <sup>th</sup> November 2016
City Council Investment Board	Lou Hayward	19 <sup>th</sup> December 2016

This Business Case is based on the Outline Business Case 'Plan for Modernising Waste and Street Services' which was discussed at Place and Corporate Overview Scrutiny Committee on 5<sup>th</sup> October 2016.

Capital Investment is required for purchase of additional 1100Ltr containers and ICT enablers.

#### I. Executive Summary

- 1.1. This project aims to implement the Plan for Modernising Waste and Street Services commencing in 2017. Creating a cleaner, greener, forward-looking city is part of achieving the overall Plymouth Plan vision that by 2034 Plymouth will be one of Europe's most vibrant waterfront cities where an outstanding quality of life is enjoyed by everyone. As part of this vision, Plymouth's population is set to increase to over 300,000 over the next 20 years, with the number of households projected to exceed 132,000.
- 1.2. It's imperative that the Council modernises services to keep pace with this population growth, ensuring that the city adopts the highest standards, and the most efficient practices in waste management and street services, to make it an attractive place for people to live, work and visit. We also need to maximize the investments we have already made in our state-of-the-art recycling and energy from waste facilities, and to build on our achievements to date.

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- 1.3. The Council has already started to reshape waste services with the optimization of collection routes early in 2015. This Plan case builds on those changes and moves the Council into the next phase of the modernisation of waste management and street scene services to create a seamless, sustainable system, in partnership with our residents. The modernisation of services is expected to generate cumulative savings of around £750k. It will require changes in attitudes and other adjustments, and it's crucial that we recognise the importance of bringing residents and staff with us through this transition.
- 1.4. Early indications from the recent 'Time for Big Decisions' resident budget engagement survey showed that whilst some people understandably have concerns about the Council making changes to services, for example altering the frequency of waste collections, others are keen to see recycling opportunities expanded and to see more education and awareness-raising.
- 1.5. Initial findings from the Household Waste Composition and Participation Study found that:
  - Overall, Plymouth's average waste generated has fallen since 2007 from 11.6kg per household per week, to 9.03 kg per household per week. This si below the national average of 9.4 kg per household per week.
  - 20% of residual waste (brown bins) found in household kerbside collections contained recyclables which could have been collected and recycled at the Materials Recycling Facility (MRF).
  - The highest proportion of recyclate available for diversion from residual waste to the MRF is from communal bins in residential flats where 28% could have been recycled, whilst in student accommodation communal bins 22% could have been recycled.
  - The best performing category were residential areas of privately owned semi detached properties where 17% of residual waste could have been recycled.
  - A further I4 % of the waste could have been recycled at the Household Waste Recycling Centres (HWRC), for example large cardboard, textiles and small electrical goods.
  - 82% of household residual waste wheeled bins were less than three quarters full only 3% of bins had no capacity – indicating the vast majority of domestic household residual waste bins could readily accommodate Alternate Weekly Collection, particularly when coupled with increased recycling.
- 1.6. Many areas of the country have shown that it is possible to achieve high levels of recycling from the municipal waste stream, and many have used reduced household collection frequencies as a driver for change. However, there is no national one-size solution to optimize waste management solutions. Every area has to adopt the best combination of practices to suit local circumstances.
- 1.7. In order to implement changes, it's crucial to gain the trust and cooperation of individuals, households and communities. It's also essential to make sure that the Council is flexible and responsive, working with people to help them make the right choices. Strong communications and clear campaigns are important factors, together with consistent awareness and education for all sections of the community and front line staff.
- 1.8. This business case identifies a balanced package of measures that will boost recycling rates and deliver efficiencies, starting with the proposed introduction of Alternate Weekly Collections (AWC). AWC was the most effective intervention overall from the range of options appraised in 2014, taking into account the potential increase in recycling rates, the cost of introducing it, and the savings it would generate. Over 75% of councils across England have now implemented Alternate Weekly Collections and there is a large body of evidence to support its effectiveness.

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1.9. Following feedback from the Place and Corporate Overview and Scrutiny Committee the priorities have been refocused on developing implementation options for introducing AWC, modernising the waste collection and street services standard operating procedures and customer service standards, and stimulating the required culture change to support the change in practices among the work force and the citizens of the service.

#### 2. National context

- 2.1. The EU Waste Framework Directive provides the legislative framework for the collection, transport, recovery and disposal of waste, and includes a common definition of waste. From that Directive the UK Government adopted the Waste (England and Wales) (Amendment) Regulations 2012 which came into force on 1 October 2012.
- 2.2. From I January 2015, waste collection authorities were required to collect waste paper, metal, plastic and glass separately. However, councils are allowed to continue to collect materials in a single 'commingled' stream, if it is possible to demonstrate that separate collections are not 'Technically, Environmentally or Economically Practicable' (TEEP). (Plymouth meets this test and is therefore is covered under this exemption).
- 2.3. The UK's simplified waste hierarchy can be represented by the steps below.



- 2.4. Diagram I. UK waste Hierarchy
- 2.5. As part of the Government's drive towards greater harmonisation and consistency in local authority recycling and waste collections, WRAP recently published 'A framework for greater consistency in household recycling for England'. This guidance sets out 3 typical models of waste recycling and collection. The framework is not mandatory but councils are expected to work towards alignment with one of the 3 models. (Appendix 1)
- 2.6. UK trends show that recycling rates have generally been increasing, but have plateaued over the last few years. Most of this increase has been achieved by encouraging more separation of waste by households, and by varying collection frequencies to incentivise recycling.
- 2.7. South Oxfordshire District Council currently has the highest national recycling rate at over 67%, however many inner city areas have also achieved impressive rates, including several of the Greater Manchester councils like Stockport and Trafford, both achieving over 60%. There is a great deal of learning that can be extracted from other areas.
- 2.8. A further driver for improving how we deal with waste is reducing greenhouse gases and

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- addressing climate change throughout the lifecycle of products, by cutting back on our use of raw materials and manufacturing processes, and by significantly reducing transport movements.
- 2.9. In Plymouth we have the challenge of reversing the perception that sending refuse to the state of the art Energy From Waste Plant is the preferred option over recycling. There is a critical driver to increase recycling to 40% to meet the contracted commitment by PCC at the Materials Recycling Facility.

# 3. Plymouth Plan

- 3.1. The Plymouth Plan sets the overarching long term vision for the city to 2034 and beyond. The city's ambition is for the population to grow from the current level of 262,172 to over 300,000 by 2034, and for the number of households to rise from 117,432 to circa 132,926 over the same period. Adopting best practice in waste prevention and sustainable waste management practices will contribute to the overall health, wealth and well-being of the City.
- 3.2. In particular, Policy 27 of the Plymouth Plan, Minimising Plymouth's Waste, outlines the city's plans to adopt the most sustainable, whilst feasible and financially viable, solutions to waste management. The Policy sets a target of 40% recycling rate by 2034, and includes a range of initiatives such as the active encouragement of home composting to reduce waste; working with community and voluntary groups and businesses to encourage more recycling; and ensuring that all new developments have adequate facilities for efficient waste storage. Whilst many of these initiatives have already been introduced there is always more that can be done to build on them, responding to changes in Government policy and taking advantage of shifts in societal attitudes and behaviours.

## 4. Corporate Plan

- 4.1. The Council's Corporate Plan includes a commitment for an improved street scene environment. To deliver this the priority actions to improve litter on streets, and to address fly-tipping in the city, as well as adopting and implementing this Plan and the delivery programme that accompanies it.
- 4.2. This plan delivers on the Corporate Plan Values in the following ways:
  - It is **Democratic** as it will enable Ward Councillors to inform the planning of collection options reflecting the views and issues faced by local citizens as well as addressing barriers to efficient service delivery. A responsive service to meet needs of citizens will be offered where a standardised service is not appropriate.
  - It is **Responsible** as it we will ensure that the impact of the change is considered and communicated across communities of geography, culture and interest, and that our collective responsibility to manage our waste effectively is conveyed via targeted education and awareness raising activities and we will hold those who persistently refuse to comply to account using proportionate enforcement action.
  - It demonstrates Plymouth City Council's commitment as a **Partner** through working with Registered Social Landlords to provide the right service for tenants in high rise blocks and with the Voluntary and Community Sector, to build on positive engagement and communication support from the waste rezoning initiative. It will also work with other service areas such as Highways and Parking to ensure potential challenges to a successful roll out are addressed.
  - The Plan delivers the Plymouth Council vision by taking a Pioneering approach to solutions that are flexible and efficient, allowing resources to be deployed to meet the priority needs of citizens; It supports Growing Plymouth by investing in a service which will

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meet the changing infrastructure needs of a growing city ensuring Plymouth is a green and pleasant city in which to live, work and study.

# 5. Plymouth's Current Waste Services

# 5.1. Waste and Recycling Service Provisions

- Most of the city's 117,423 households are provided with two 240 litre wheeled bins. This includes a **brown bin** for general refuse which is collected weekly, and a **green bin** collected fortnightly for mixed recyclables. Five material types glass, paper, cardboard, plastics and metals can be deposited in the green bin.
- There is a free city wide seasonal fortnightly kerbside collection of garden waste (except for flats and other properties without gardens). Approximately 5,000 tonnes per year is collected and composted.
- The city has two Household Waste Recycling Centres (HWRCs), Weston Mill and Chelson Meadow. In 2012, Chelson Meadow the larger of the sites was fully reconfigured and redeveloped through a £2.2m investment. This led to an increase in the material received on site being diverted for reuse, recycling and composting from 63% to 80%.
- The Materials Recycling Facility at Chelson Meadow was upgraded in 2015 enabling the kerbside collection of glass, as part of the fortnightly recyclables collection, and increasing the quality and quantity of recycled materials from households and trade sources to over 19,000 tonnes in 2015/16.
- The trade waste collection service provides waste and recycling collections to around 1500 Plymouth businesses, including schools and corporate properties.
- A commercial waste disposal service is available at Chelson Meadow Household Waste and Recycling Centre.
- Bulky waste services for large items over 25kg collect circa 3,600 items per year which amounts to around 510 tonnes. Material is sorted and items recycled where possible.
- Plymouth's Energy from Waste (EfW) Combined Heat and Power Facility came on line in April 2015 to treat residual waste and produce heat and power for the Devonport Naval Base. It is a 'State of the art' high-efficiency residual waste treatment facility. Since being fully commissioned, 99.99% of the waste it processes is diverted from landfill.
- Metals from the incinerator bottom ash (IBA) are recycled, and the remaining IBA is treated and used as an aggregate in the construction industry.

#### 6. Performance

- In 2015/16 the Council collected 125,295 tonnes of municipal waste Local Authority Collected Municipal Waste. (LACMW is all the waste collected under the authority's control i.e. waste from households, shops, businesses, schools, charities, churches etc.)
- Of the 125,295tonnes of LACMW, 43.2% was reused, recycled or composted
- 105,000 tonnes of the 125,295 tonnes collected was household waste, of which 32.6% was reused, recycled or composted (national average in England for 2014 was 44.8%, DEFRA)
- Plymouth residents generated 414Kg of waste per head of population (national average for 2014 was 413Kg, DEFRA)
- Plymouth's recycling rate of household waste has remained fairly static since 2007/8, at around 32% 33%. The introduction of glass into the dry recyclate household kerbside collection scheme in 2014/15 produced an increase of 3%. However, this increase was effectively negated by changes in the national definitions as to what could be included in the

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- data (see next bullet). The latest figures (2015/16) show that Plymouth's household recycling rate is 32.6%.
- A decline in recycling rates was experienced by many authorities in England largely due to the change in classification of Street Sweepings (sent for composting) by DEFRA, moving their classification from household to municipal waste and imposing tighter standards for secondary markets and re-processors.
- Plymouth also experienced a significant decline in the volumes of garden waste sent for composting following the implementation of restrictions at the HWRCs to prevent cross border misuse (use of the HWRCs by non-Plymouth residents). This policy saved the service £16k in 2015/16.

# 7. Challenges and Opportunities

## 7.1. Challenges:

- The costs of waste recovery through the Energy From Waste (EFW) plant will rise each year and if the city continues to grow the tonnage of waste collected will also increase.
- It is understood that by providing a reduced capacity for brown waste, that citizens are more inclined to recycle more. This reduced capacity can be effectively achieved by reducing the frequency of collections (based on the 75% of local authorities that have gone before us).
- There is evidence that switching to alternate weekly collection (AWC) reduces the amount
  of recyclables being thrown away as refuse and increases the tonnage of recyclables sent for
  reprocessing.
- The Household Waste Participation and Composition Study initial findings indicate 20% of waste from kerbside collections is recyclable which could be diverted to the MRF. The target of capturing at least 5 % through this package of measures which includes AWC requires an increase in recycling activity from citizens.
- The biggest change to recycling habits required is with residents using communal bins in accommodation blocks where 28% of their residual waste could be recycled, followed by students in communal accommodation blocks where 20% could be recycled.
- The benefit to the city will be that next year the Materials Recycling Facility (MRF) processing costs will be approx. £30 per tonne cheaper than the Energy from Waste (EFW) and at the same time the domestic recycling rate will increase.
- The EFW waste partnership requires Plymouth City Council to reach a recycling rate of 40% which we are currently short of and if we do not make this figure the PFI credits (£177m) we receive are at risk, Switching to AWC is a positive step toward meeting that target.
- There is currently no formalised Waste and Recycling policy on which to base clear communications for Plymouth citizens regarding the level of citizen service they can expect and the obligations on them to store and present their waste as required.
- Inconsistencies in the adherence to operating procedures due to no formal policy in place, present inefficiencies and inconsistent health and safety practices. This is exacerbated by supervisors currently focussed on reacting to customer complaints reducing their hands on management time.
- To implement the changes a significant shift in the culture of the workforce will be needed, in a climate where there will be rationalisation of crew sizes and changes in role profiles and standard operating procedures.

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- To enforce effectively, clear Waste and Recycling Policy and guidelines are required.
- Plymouth has a high student and transient population, and areas of the city with high levels
  of deprivation which are known to reduce the rates of participation in recycling.
- Waste collection crews currently have to pull out in excess of 15,000 wheeled bins to the kerb side for the operators to tip into the waste collection vehicles in addition to the Assisted Collection service provided (circa 9000 households). This practice currently adds approximately 3 hours per day to an average round and presents various health and safety challenges for crews e.g. steps
- There are significant areas of high density housing, flats and narrow streets which create issues with storage of bins and collection of waste and cleansing of the public realm.
- Frequent vehicle movements contribute to traffic congestion, particularly given the layout of much of the city with narrow alleys and lots of shared living accommodation.
- Without intervention, the projected increase in the population and housing numbers could exacerbate these problems.
- Respondents to the 'Time for Big Decisions' survey (August/September 2016) expressed some concern about moving to alternate weekly collections for general waste, citing health and environmental concerns, particularly around rotting food waste creating an unpleasant smell within local communities and the potential for vermin.
- Respondents also cited concerns about the green recycling bins getting fuller quicker and overflowing into the streets thus creating the need for greater levels of street cleansing in some areas and also the potential for increased fly tipping.

#### 7.2. Opportunities

- Revising and formalising the Waste and Recycling Policy will provide the crucial backbone
  for the modernised service and will define the requirements for the working practices and
  customer service standards, the range of skills and work force required and the resources
  and performance management required. It also provides the basis against which
  enforcement action can be taken.
- The Household Waste Composition and Participation Study showed that up to 20% of the residual waste collected could be diverted to the MRF and a further 14% could be diverted to the HWRCs. Therefore there is ample opportunity to increase recycling habits in the city through incentivised measures such as AWC alongside awareness raising and education to achieve the 40% recycling target required within the PFI contract.
- The range of initiatives proposed includes opportunities to redirect recyclate from litter bins which currently go to the EFW plant to the MRF – contributing to the 40% recycling target for the city.
- The proposed changes will generate more efficient standard operating procedures for staff and clearer obligations on the citizens of Plymouth to present their waste.
- Delivering the proposed changes will enable a new collaborative approach to zonal working involving all functions within the Waste and Street Services, including some changes to organisational structure, role profiles and numbers of FTE's.
- Optimising work schedules and working in cross-functional teams will create the biggest impact towards making Plymouth a greener, cleaner city.
- The requirement to work collaboratively to deliver the new way of working will bring
  opportunities for the workforce to inform new standard operating procedures and address
  frustrations that have prevented them from delivering the consistently outstanding level of

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service to which they aspire.

- Ward Councillors and service staff will benefit from a clear, formalised Waste and Recycling Policy, along with the associated customer service standards which will ensure a consistent standard of service and a reference point for managing citizens' expectations and giving a consistent response to citizens' queries.
- Additionally, the Plymouth Food Waste Partnership feasibility study (due to be published at the end of October) will further inform the plans for the modernisation of the service, as well as inform future options appraisals for considering food waste collection following the successful implementation of AWC and the service modernisation measures.
- Studies elsewhere have shown that at least 60% of household waste can be recycled. ('Resource futures' have been commissioned to undertake a compositional analysis of a sample of Plymouth's household residual waste stream and a recycling participation survey. This is taking place at the end of October 2016.) This will also inform the modernisation plans.
- 7.3. In the recent 'Time for Big Decisions' consultation, feedback from respondents indicate the following opportunities and challenges, which will inform the modernisation of the service:

Respondents Feedback	Proposed Intervention
Respondents reported they would recycle more if their household received an alternate weekly collection	There is an opportunity to divert up to 20% of residual waste from kerbside collections to the MRF. AWC will deliver an estimate 5-9% increase in recycling based on the AMEC 2014 analysis (Appendix J) Residents will be benefits from:
	I. A targeted collection service which ensures the right recycling container for the location, accommodation type, access and storage needs of citizens.
	2. A comprehensive education campaign which will help citizens to learn new ways of recycling more effectively.
Respondents said the city as a whole should do more about recycling – showing a greater appetite for increasing overall recycling rates.	Education and awareness raising will be supplemented by a range of initiatives that will put recycling at the heart of our Litter Strategy for the city. Introducing Recycling-on-the-Go facilities in city parks, the Waterfront and city centre; ensuring all PCC buildings are maximising opportunities for recycling, increasing the uptake of recycling within our business community.
Need for education campaigns, specifically targeting school children and students as key audiences who are most likely to affect change.	A comprehensive recycling education and awareness campaign for residents will support the implementation of AWC which will include increased collaboration with the City's universities to advise and assist students, and with Registered Social Landlords and Private Landlords to ensure recycling is promoted and supported with their tenants. Provision for recycling workshops in schools are available through partnership with Resource Futures (an environmental organisation) and schools to ensure that all children have the opportunity to visit the EFW facility which provides tours of the site and waste minimisation and recycling workshops'.
Respondents identified a need for increased enforcement for persistent contamination of recycling bins and for non – compliance with waste storage and presentation generally. Conversely,	The Council will support residents to effectively recycling and will take action to change non-compliant behaviour and where this is not possible, to enforce against persistent offenders of poor presentation of waste (i.e. bins and black bags left on streets on non-collection days) and fly tipping. To support this, frontline staff will receive evidence gathering training to increase the effectiveness and reach of

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there was little support for reward schemes.

our PACE trained enforcement officers, through a collaborative enforcement programme. Recent trials and research into reward and schemes have produced minimal positive impact on recycling and lacked stimulus to change attitude and behaviour amongst non-recyclers'.

Respondents said their household would not recycle more as a result of receiving an Alternate Weekly Collections

This resident perception is countered as there is a strong correlation between the introduction of Alternate Weekly Collections and increased recycling rates. Over the last 10 years around 75% of councils in England have moved to Alternate Weekly Collections, and there is now a growing trend of councils moving from 2, to 3 weekly collections for general waste and recyclable materials. Oldham, Salford, Rochdale and Bury Councils are moving ahead. Other councils that are in the process of adopting AWC during the autumn of 2016 include Blackburn and Darwin, and Poole Councils.

The Household Waste Composition and Participation analysis determined that 82% of residual bins collected at kerbside have at least 25% capacity and only 3% of the bins had 0% capacity.

Residual waste contained 17% of dry recyclate even in the highest performing areas of the city for recycling – and up to 28% in communal housing areas. Encouraging residents to divert this to their recycling bin will create further residual bin capacity.

This supports the assertion that a 240 litre capacity of each bin is sufficient to accommodate the fortnightly collection of residual and dry recyclate collection for most households.

Collection of food waste was a popular suggestion as to how the city could improve its recycling further

Plymouth Food Waste Partnership feasibility study is due to be published at the end of October will inform future options appraisals for considering food waste collection following the successful implementation of AWC and the service modernisation measures.

37% of the residual waste measured in the Household Waste Composition and Participation analysis was food waste, 14% of which was still in unopened packaging and a further 10.6% avoidable food waste.

To provide a food waste recycling service in Plymouth would require investment in a new fleet of specialised vehicles, appropriate containers for all residents – this could cost in the region of £1,156,000. It would then cost in the region of £800k net to deliver the service. It would also counter the 50% reduction on CO2 emissions achieved by moving to Alternate Weekly Collections and represent an increase of 100% arising from a weekly food waste collection. More detailed analysis is required to examine the costs and benefits of a Food Waste Recycling initiative.

Food Waste is currently processed at the EFW along with residual waste and WRATE analysis (an EA environmental impact modelling tool) shows that food waste being sent to our high-efficiency EfW plant is better (across 5 of the 6 measures including CO2 impact) than collecting separately and going to an Anaerobic Digestion plant.

Food Waste Recycling relies on high participation rates – nationally this is proving challenging with highest performers only achieving 50% Food Waste recycling, and several authorities considering removing the service due to low participation rates versus high costs and CO2 disbenefits. E.g. Wolverhampton City Council are consulting

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residents about pulling out of their Food Waste Recycling Scheme as they are achieving 20% participation.

Concern about moving to alternate weekly collections citing health and environmental concerns, particularly around rotting food waste creating an unpleasant smell within local communities and the potential for vermin. There was also concern about the green recycling bins getting fuller quicker and overflowing into the streets thus creating the need for greater levels of street cleansing in some areas and also the potential for increased fly tipping.

Education campaigns will reassure citizens that concerns re AWC can be addressed, for example, no documented evidence of a direct link between frequency of waste collection and any actual health impacts on householders (source: Scoping Study of Potential health Effects of Fortnightly Residual Waste Collections, WRAP & COWM, 2009). Councils with AWCs found that there is no additional health risk or increase in unpleasant odours or vermin from less frequent collection of residual waste which includes food, soiled nappies and wet wastes, provided simple precautions were taken – for instance double wrapping of food wastes and other waste likely to produce offensive odours and ensuring that bin lids are closed.

Collaborative working across the cross-functional waste and street cleansing teams, civil enforcement officers and public protection teams will obtain admissible evidence to bolster the enforcement capability and capacity.

# 8. Modernising the Service - the approach

- 8.1. A preliminary review of waste management and street services has indicated that modernisation in line with national best practice would:
  - Align and deploy services to maximise efficiency
  - Provide consistent standards of citizen service
  - Progress towards our environmental sustainability targets (e.g. CO2 reduction)
- 8.2. A holistic approach to service delivery with increased cross departmental and collaborative working is essential to create the type of impact that will be required to be successful. Our staff are our greatest asset and their knowledge and expertise will drive the modernisation of the service they are critical to its success
- 8.3. The key to success is gaining the trust and cooperation of residents, and making it easy for them to make good choices.
- 8.4. Based on all the evidence available, implementing AWC will increase Plymouth's recycling rates; reduce collection and disposal costs; and will reduce the council's Carbon footprint by saving an estimated 28 tonnes of CO<sub>2</sub> emissions per annum.
- 8.5. Alternate Weekly Collections will need to be part of a balanced package of measures aimed at modernising services over the next few years. These will be evaluated as part of the Implementation Plan
- 8.6. Additionally, there is a package of project enablers (see section '16. Project Enablers'), which are critical to ensuring the effective implementation of the modernised service.

#### 9. Options Appraisal

- 9.1. Three high level options based on the Amec Options Appraisal 2014 were considered at Place and Corporate Services Overview and Scrutiny Committee on 5th October 2016. The recommendation as for a full Business Case to be developed based on the preferred option to deliver a holistic approach to modernising the service including introducing Alternate Weekly Collections.
- 9.2. The options appraisal conducted for the Council by Amec in 2014 showed that from a mixed range of 19 interventions and activities evaluated, Alternate Weekly Collections (AWC green bin collected one

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- week, and brown bin the next) had the potential to boost recycling rates by up to 5-9% per annum, and to generate savings in the region of £452K.
- 9.3. These figures were based purely on implementing the change to AWC in isolation; however the basis of this Business Case is to set the scene for the wider modernisation of services by looking at a combination of interventions which is expected to generate a further £298K of savings (detailed in the Benefits Section.)
- 9.4. Following feedback from the Place and Corporate Services Overview and Scrutiny Committee, this business case has focussed on a range of measures which will modernise the service. This starts with the revision and formalisation of forward looking Waste and Recycling Policy required to enable the workforce to operate more efficiently and to communicate effectively with citizens, is undertaken and forms the backbone of the modernisation process.
- 9.5. A series of key changes to realign service functions will then be undertaken to implement the Standard Operating Procedures which will deliver against the Policy and customer service standards.
- 9.6. These changes are detailed in the options appraisal.

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## 10. Option 1: Do Nothing

- 10.1. The opportunity to significantly increase household recycling rates towards the 40% target for the Materials Recycling facility will not be achieved.
- 10.2. Contributions to the 60% reduction in carbon emissions and footprint will not be realised through reduction of fuel consumption and vehicle emissions.
- 10.3. The total costs of operating the current Waste and Recycling Collection service will remain at £5,390,568 (based on the areas of the service in scope for this business case, which are vehicles and associated operating costs and staffing)
- 10.4. The Council will not achieve the £750K recurring savings required, which can be achieved from modernising this service.

# 10.5. 'Do Nothing' Costs

Cost Description	% Confidence	Revenue or Capital	Yr. 0	Yr. I	Yr. 2	Yr. 3
Cost of Waste and Recycling Collection vehicles and operating costs	75	Revenue	2,145,746	2,145,746	2,145,746	2,145,746
Costs of Waste and recycling Staff	75	Revenue	3,244,822	3,244,822	3,244,822	3,244,822
TOTAL COST		Revenue	5,390,568	5,390,568	5,390,568	5,390,568

### 10.6. 'Do Nothing' Benefits

Benefit Description	% Confidence	Yr. 0	Yr. I	Yr. 2	Yr. 3
There are no benefits to Option 1:  Do Nothing	100	0	0	0	0
TOTAL BENEFIT	100	0	0	0	0

# 10.7. 'Do Nothing' Cost Benefit Summary

	Yr 0	Yr I	Yr 2	Yr 3
Costs	5,390,568	5,390,568	5,390,568	5,390,568
Benefits	0	0	0	0
Benefit-Cost	-5,390,568	-5,390,568	-5,390,568	-5,390,568

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# 11. Option 2: Modernisation of Waste and Street Services

11.1. It is recommended that Option 2 is approved by Cabinet.

This option has the highest degree of confidence in delivering the required £750K recurring savings (17/18 initial benefit of £250k, the full £750K year being realised from 18/19 and 19/20).

# This will incorporate:

- 1. Alignment of the Waste Services and Street Scene and Grounds Maintenance Service
- 2. Introduction of Alternate Weekly Collections of all residual waste for households across the city at a one off cost of £499k in 2017/18.
- 3. Option 2 would reduce the annual cost of the service from £5,390,568 by £750K, equalling £4,640,568 per year.
- 4. Working with elected members and staff identify the optimum collection solution for areas across the city where kerbside collection of wheeled bins is not the most efficient option.
- 5. Development of efficient Waste Collection and Recycling Policy and customer service standards, which will ensure a high quality and consistent standard of service to meet the needs of this growing city
- 6. Development of lean and modern standard operating procedures for waste collection and street scene functions, operating on a zonal, scheduled, holistic approach to the service. Ensuring the health and safety of staff and the public and an efficient, consistent service.
- 7. An implementation plan for rezoning and scheduling of waste collection rounds to ensure minimum disruption for residents and an efficient and cost effective deployment of staff and vehicles.
- 8. An Engagement and Communications strategy and plan which will ensure staff are able to co-design the new Standard Operating Procedures and staff is able to inform the development of the Waste Collection and Recycling Policy.
- 9. A review of the enforcement activity and resources allocated to increase effective enforcement of persistent non-compliance
- 10. A reduction in the fleet of vehicles in use from the current 38 to 30 (6 of which will be hire vehicles, 2 from the fleet)
- 11. A reduction in the size of the standard waste collection crew from the current 3 operatives plus a driver to 2 operatives plus a driver. This resource would be deployed flexibly, allowing for a driver plus one operative or driver plus 3 operatives to be deployed where there is a clear business need for a tailored approach.
- 12. A review of the current access issues affecting waste collection and street services crews from completing their rounds efficiently a collaborative approach to addressing these issues via Traffic Restriction Orders/reinstating lining and signage and a targeted education and enforcement action.
- 13. Creation of a Service Level Agreement with Fleet Management which will ensure there is the required number of vehicles operational to efficiently complete the waste collection rounds in accordance with the waste collection and cleansing schedule
- 14. Implementation of a range of on the go recycling facilities in city parks, the city centre and waterfront areas.
- 15. Introduction of in-cab technology which will enable 2-way communication with the Contact Centre to report and respond to issues in real time.
- 16. Introduction of mobile devices for team leaders who will be able to provide real time reporting of issues such as fly tipping, and record evidence for use by Customer Liaison

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Officers to undertake education visits or to PACE trained colleagues/Public Protection Team to enforce as appropriate.

### 11.1. Modernisation of Waste and Street Services: Costs

Cost Description	% Confidence	Revenue or Capital	Yr. 0	Yr. I	Yr. 2	Yr. 3
Rationalisation of crew staff	75	Revenue	0	179,224	0	0
Phased reduction of vehicles	75	Revenue	0	150,700	0	0
Advertising costs for change - collection points/days	75	Revenue	0	87,000	0	0
Borrowing costs of bins per year (capitalised)	75	Revenue	0	67,411	67,411	67,411
Bin delivery of new receptacles (resources)	75	Revenue	0	10,000	0	0
PACE training for officers	75	Revenue	0	5,000	0	0
TOTAL COST Per year		Revenue	0	499,335	67,411	67,411

# 11.2. Modernisation of Waste and Street Services: Benefits

Benefit Description	% Confidence	Yr. 0	Yr. I	Yr. 2	Yr. 3
Savings derived from reduction of current fleet of vehicles from 38 to 30 (removal of 6 hire vehicles + 2 fleet)	75		201,672	269,083	269,083
Savings derived from reduction in operating costs for vehicles removed from fleet.	75		96,000	96,000	96,000
Savings derived from a reduction in the size of waste collection crews.	75		452,102	452,102	452,102
TOTAL BENEFIT Per year	75		749,774	817,185	817,185

# 11.3. Modernisation of Waste and Street Services Cost Benefit: Summary

Туре	Yr. 0	Yr. I	Yr. 2	Yr. 3
Cost	0	499,335	67,441	67,441
Benefit	0	749,774	817,185	817,185
Benefit-Cost	0	250,439	749,744	749,744

# 12. Option 3: Replacement of 240Ltr wheeled bins with 120 Ltr wheeled bins for waste.

12.1. Replace all 240ltr Brown waste containers with 120ltr brown waste containers – based on

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- 100,000 households receiving replacement containers at a cost of £15 per unit. The assumption is that by providing less space for waste, citizens will be inclined to use their recycling capacity (which will remain at 240ltr) and will respond to education and awareness raising and improve their sorting and recycling practices.
- 12.2. This option requires considerable investment of £1,960, 039 for a recurring annual benefit of £166,073. Projected year break even on Investment is Year 11. Year 12 is the first year when financial benefits could be realised.

Option 3 would reduce the annual cost of the service from £5,390,568 by £0 per year until year 11.

# 12.3. Option 3: Replacement of 240Ltr wheeled bins with 120Ltr wheeled bins for waste: Cost.

Cost Description	% Confidence	Revenue or Capital	Yr. 0	Yr. I	Yr. 2	Yr. 3
Purchase of Brown 120 I wheeled bins x 100,000@ £15 per unit	75	Revenue	0	1,500,000	0	0
Staff costs to pick up 240 I bins and replace with I20 I bins	75	Revenue	0	150,230	0	0
Vehicle costs for picking up 2401 bins and replacing with 120 l bins	75	Revenue	0	39,809	0	0
Storage of collected bins	75	Revenue	0	120,000	0	0
Communications	75	Revenue	0	150,000	0	0
TOTAL COST		Revenue	0	1,960,039	0	0

# 12.4. Option 3: Replacement of 240Ltr wheeled bins with 120Ltr wheeled bins for waste: Benefits

Benefit Description	% Confidence	Yr. 0	Yr. I	Yr. 2	Yr. 3
Diversion of 3% waste from Energy from Waste plant to the Materials Recycling Facility (tipping costs)	75		166,073	166,073	166,073
TOTAL BENEFIT	75		166,073	166,073	166,073

12.5. Option 3: Replacement of 240Ltr wheeled bins with 120Ltr wheeled bins for waste: Benefit Summary.

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Туре	Yr. 0	Yr. I	Yr. 2	Yr. 3
Cost		1,960,039	0	0
Benefit	0	166,073	166,073	166,073
Benefit-Cost	0	-1,793,966	-1,627,893	-1,461,820

# 13. Recommendation: Option 2 Modernisation of Waste and Street Services Benefits

#### 13.1. It is recommended that Option 2 is approved by Cabinet.

This option has the highest degree of confidence in delivering the required £750K recurring savings (17/18 initial benefit of £250k, the full £750K year being realised from 18/19 and 19/20).

#### This recommendation will include:

- 1. Alignment of the Waste Services and Street Scene and Grounds Maintenance Service
- 2. Introduction of Alternate Weekly Collections of all residual waste for households across the city at a one off cost of £499k in 2017/18.
- 3. Option 2 would reduce the annual cost of the service from £5,390,568 by £750K, equalling £4,640,568 per year.
- 4. Working with elected members and staff identify the optimum collection solution for areas across the city where kerbside collection of wheeled bins is not the most efficient option.
- 5. Development of efficient Waste Collection and Recycling Policy and customer service standards, which will ensure a high quality and consistent standard of service to meet the needs of this growing city
- 6. Development of lean and modern standard operating procedures for waste collection and street scene functions, operating on a zonal, scheduled, holistic approach to the service. Ensuring the health and safety of staff and the public and an efficient, consistent service.
- 7. An implementation plan for rezoning and scheduling of waste collection rounds to ensure minimum disruption for residents and an efficient and cost effective deployment of staff and vehicles.
- 8. An Engagement and Communications strategy and plan which will ensure staff are able to codesign the new Standard Operating Procedures and staff is able to inform the development of the Waste Collection and Recycling Policy.
- 9. A review of the enforcement activity and resources allocated to increase effective enforcement of persistent non-compliance
- 10. A reduction in the fleet of vehicles in use from the current 38 to 30 (6 of which will be hire vehicles, 2 from the fleet)
- 11. A reduction in the size of the standard waste collection crew from the current 3 operatives plus a driver to 2 operatives plus a driver. This resource would be deployed flexibly, allowing for a driver plus one operative or driver plus 3 operatives to be deployed where there is a clear business need for a tailored approach.
- 12. A review of the current access issues affecting waste collection and street services crews from completing their rounds efficiently a collaborative approach to addressing these issues via Traffic Restriction Orders/reinstating lining and signage and a targeted education and enforcement action.

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- 13. Creation of a Service Level Agreement with Fleet Management which will ensure there is the required number of vehicles operational to efficiently complete the waste collection rounds in accordance with the waste collection and cleansing schedule
- 14. Implementation of a range of on the go recycling facilities in city parks, the city centre and waterfront areas.
- 15. Introduction of in-cab technology which will enable 2-way communication with the Contact Centre to report and respond to issues in real time.
- 16. Introduction of mobile devices for team leaders who will be able to provide real time reporting of issues such as fly tipping, and record evidence for use by Customer Liaison Officers to undertake education visits or to PACE trained colleagues/Public Protection Team to enforce as appropriate.

The remaining detail on this Business Case is based on the recommended option detailed above.

Cost Description	% Confidence	Revenue or Capital	Yr. 0	Yr. I	Yr. 2	Yr. 3
Phased rationalisation of crew size	75	Revenue	0	179,224	0	0
Phased reduction of vehicles	75	Revenue	0	150,700	0	0
Advertising costs for change - collection points/days	75	Revenue	0	87,000	0	0
Borrowing costs of bins per year (capitalised)	75	Revenue	0	67,411	0	0
Bin delivery of new receptacles (resources)	75	Revenue	0	10,000	0	0
PACE training for officers	75	Revenue	0	5,000	0	0
TOTAL COST		Revenue	0	499,335	0	0

Benefit Description	% Confidence	Yr. 0	Yr. I	Yr. 2	Yr. 3
Savings derived from reduction of current fleet of vehicles from 38 to 30 (removal of 6 hire vehicles + 2 fleet)	75		201,672	201,672	201,672
Savings derived from reduction in operating costs for vehicles removed from fleet.	75		96,000	96,000	96,000
Savings derived from a reduction in the size of waste collection crews.	75		452,102	452,102	452,102
TOTAL BENEFIT	75		749,774	749,774	749,774

Туре	Yr. 0	Yr. I	Yr. 2	Yr. 3	Total
Cost	0	499,335	0	0	499,335
Benefit	0	749,774	749,774	749,774	2,249,322

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Benefit-Cost	0	250,439	749,774	749,774	1,749,987
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# 14. Identified Cost Centre and Description

Cost Centre's affected are:

0955 – Refuse Domestic

2747 – Recycling

4356 – Garden Waste

# 15. Non-Financial Benefits

Soft Benefit	Corporate Link	Yes/No
Improved Customer Experience	Pioneering	Planned service focussed on delivering agreed customer service standards — not reacting to requests/complaints.  Agreed customer service standards account for tailored approach where there is a clear business need.  Improved citizen awareness of service standards and managing of expectations resulting in a reduction in call centre service requests and complaints.  Live reporting of issues by operatives to pre-empt customer service requests
		and address issues quickly.
Better use of assets/Technology	Growing	In cab technology/mobile devices with real time updates at contact centre and Firmstep.  Mobile devices for team leaders to record evidence/live report issues.
		Performance monitoring enabled.
Greater Staff Efficiency	Pioneering	Savings derived from intelligent targeting of collection crews; More efficient deployment of staff arising from change in areas currently requiring effort to pull out containers from hard to access properties More efficient deployment of staff by removing the practice of Friday missed bin collections. More efficient overall performance management by effective deployment of supervisors to ensure consistent service delivery by work force.
		Fewer customer service requests/customer complaints – focus on planned service delivery to defined standards and schedule.

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Stronger Partnerships	Confident	Collaborative working with external partners including Registered Social Landlords, Private Sector Landlords, Universities, Student Unions and UNITE will enable more effective targeting of communications, addressing hotspot issues, providing the right solution for specific types of accommodation.  Collaboration with the colleagues in Civil Enforcement and Highways teams will ensure access issues which hinder waste and cleansing services are systematically addressed;  Collaboration with Public Protection Service and Community Connections Service will ensure effective education is supported by proportionate enforcement activity;  Building on successful engagement
		partnerships with the Voluntary Community and Social Enterprise, PADAN, Highbury Trust, and the Green Infrastructure friend's network will ensure well informed and consulted Policy and customer service standards are produced, and positive change champions are deployed to support embedding the new way of working.
Improved Knowledge/Data	Growing	Use of Management Information to inform service improvement and more effective targeting of resources, which may lead to further savings from reduced fuel costs/more efficient deployment of work force.
		Capturing operative/driver knowledge on routes and live reporting will reduce service requests and complaints from citizens coming into the call centre.
Improved Public Image	Confident	Work force are empowered and enabled to report and resolve issues before citizens are affected and likely to complain or make a service request. Well publicised customer service standards and policy will ensure citizens are better informed and have realistic expectations of the service and know what to expect and when.
		Zonal cross-functional working will have a visible presence in an area with a marked increase in positive impact on

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		levels of cleanliness and tidiness of green and hard public realm.
Increased Staff Engagement	Confident	Co-design with the workforce is a key feature of this plan, this will increase staff engagement. Giving ownership of process design to the workforce will further increase engagement.
Increased Accountability	Pioneering	The implementation of the Waste and Recycling Policy will explicitly lay out the responsibilities of the service, customers and partner organisations, thus lines of accountability will clearly visible.
		The policy will be communicated through engagement with the workforce, residents and partner organisations; this will give greater awareness and drive up accountability.
Increased Change Readiness	Pioneering	By aligning the Waste and Street Services, modernising their policy and standard operating procedures and customer care standards, they will be better equipped to respond to the future pressures and opportunities arising from city growth and economic drivers.
Simpler/Clearer Processes	Pioneering	Key processes will be reviewed and reengineered with a strong focus on removing wasteful practices and ensuring that lean principles will be introduced.
Sustainable Development	Growing	Modernising the service ensures it will address the needs of a growing city whilst accelerating towards the Plymouth Plan's 2034 target of 40% recycling and reduction in CO2 emissions by 60% by 2020.

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# 16. Project Enablers

The enablers below are key to the successful delivery of the modernised service and to realising the financial and intangible benefits from the project.

Intervention	Requirement	Investment
In Cab Technology	Live updates on location, live reporting of issues, missed bins, provision of performance data, 2 way communications with Service Centre	£70K – agreed by CCIB 10/10/2016 within agreed ICT capital spend (allocation of £100k for Street Services)
Operative Mobile Devices	Provision of equipment to support 2 way communications with the Service Centre, collection of evidence for enforcement and collection of performance data	£30k – agreed by CCIB 10/10/2016 within agreed ICT capital spend (allocation of £100k for Street Services)
Introduction of Traffic Restriction Orders to enable clear access for waste and recycling collection and cleansing vehicles to offer a complete service	Programme of Traffic Restriction Orders, lining and signage to address access issues affecting provision of waste and cleansing services	Estimated at £2.5k per TRO plus circa £1K per intervention. This is to be owned within the wider street services department
Provision of 1100L Communal Containers TBD as part of this project	Purchase of new 1100L bins – number to be determined by the mapping and engagement work as part of this project.	City Council Investment Board proposal being developed (November 2016)

# 17. Dis-benefit

Element	Comment	How will it be measured	Mitigation
Increase in contaminated recyclate arising from the roll out of AWC.	There will inevitably be some initial contamination, particularly in some communal bins – incur increased costs to sort it (separate collection)	Number of contaminated I 100lts recycling bins  Volume of redirected to recyclate to EFW not MRF	Targeted education and awareness raising for citizens Recycling I I 00lts bins fitted with apertures to discourage contamination and encourage recycling
Increase in customer queries and requests	Although concerted efforts will be made to	Contact Centre data during 6 weeks post	Contact Centre will plan for and manage

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the change.

regarding perceived/actual missed bins during the bedding in period until citizens have adapted to AWC	ensure clear and timely messaging about the changes, some citizens will still either not realise the change has happened and think their collection has been missed, or will not accept the change and call to request a service/make a complaint.	go live for AWC	the likely increase in citizen queries and service requests; Waste supervisors, Customer Liaison Officers and Ward members will be clear on responses and adherence to scheduled role out and approach to missed bins/additional requests
			Supporting messages and FAQS will be drafted for all contact centre, waste and street services staff and for Ward Councillors so that consistent messaging and responses to queries will support the shift in citizen behaviour needed to embed

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#### 18. Assessment of the impact on staff

- 17.1. There is a total of 130 staff within the waste collection service which will see most of the changes.
- 17.2. There is a further 130 staff within the Street Cleansing and Grounds Maintenance Department that these changes will have an operational impact on as we seek to further align the two service areas to enable cross function zonal working.
- 17.3. Existing staffing levels will need to be maintained until the implementation of the project.
- 17.4. This project does not see any changes to employees terms and conditions; however, it will result in a rationalisation of the workforce (agency and permanent staff) and also changes to working practices to standardise operations.
- 17.5. Employees will be provided with the opportunity to co-design the reshaping of the services and will be consulted at regular stages of the project. Their input will be critical to the success of the changes. Trade union representatives will also be consulted at key stages of the project.
- 17.6. The main impact on staff will be the changes to working practices. For example, the introduction of standard operating procedures and customer service standards as well as the introduction of in cab technology and using hand held devices. Therefore, an investment in training will be required to ensure the workforce is appropriately skilled to support the successful implementation of the project.
- 17.7. It is anticipated that any reduction in staffing levels will be mitigated through a reduction in the number of agency staff employed by the service and through redeployment opportunities which will be available within the service and across the Council.
- 17.8. To support the redeployment, process a workforce development plan will be established to provide staff with essential skills training prior to any changes being implemented. This will give employees the best opportunity to secure a role in the future service or within the Council retaining their knowledge, skills and experience. Career transition support will also be provided by HR.

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## 19. Expected resource requirements

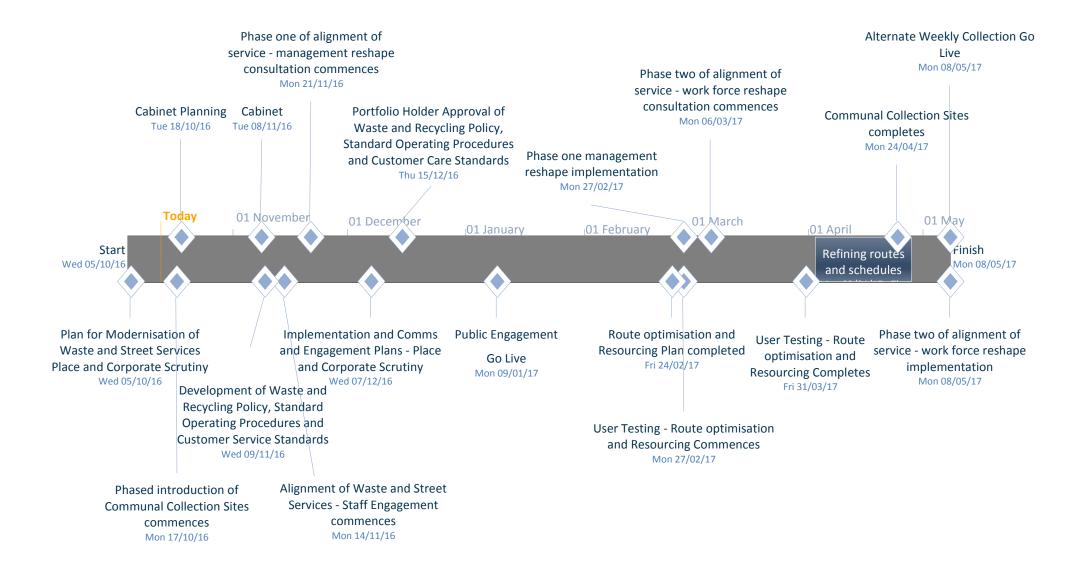
- 19.1. The resources required are outlined as follows (Modernisation resources, paid for from GAME02 budget)
  - Project Manager x I (October 2016 June 2017)
  - Business Analyst x 2 (October 2016 April 2017)
  - Project Support Officer x 0.5 (October 2016 June 2017)
  - Business Change Advisor x 0.25 (October 2016 April 2017)
- 19.2. Other resources to support the project throughout delivery phase (these are change champion roles from the service areas and are not full-time resources)
  - Change Champions (Waste) (October 2016 Jun 2017)
  - Change Champions (SCGM) (October 2016 Jun 2017)
  - Change Champion (Parking) (October 2016 Jun 2017)
  - Change Champion (Highways) (October 2016 January 2017)
  - Contact Centre Manager (October 2016 June 2017)
  - Firmstep Developers (December 2016 May 2017) (provided from CST03)
- 19.3. Other resources required to assist, guide and ensure effective project delivery include:
  - Communications Officer
  - Finance Officer
  - Legal Services Environmental Lawyer
  - HR Advisor
  - Learning & Development Advisor
  - Performance Officer
  - Business Architect
  - IT / Technology specialist (DELT)
  - Procurement Officer

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# 20. Key Milestones

Key Milestone Description	Key Milestone Delivery Date
Plan for Modernisation of Waste and Street Services to Place and Corporate Overview and Scrutiny Committee	5/10/2016
Phased introduction of Communal Collection Sites commences	17/10/2016
Development of Waste and Recycling Policy, Standard Operating Procedures and Customer Service Standards Commences	9/11/2016
Alignment of Waste and Street Services - Staff & Trade Union Engagement commences	14/11/2016
Phase one of alignment of service - management reshape. Consultation commences	21/11/2016
Implementation and Comms and Engagement Plans - Place and Corporate Overview and Scrutiny Committee	7/12/2016
Portfolio Holder Approval of Waste and Recycling Policy, Standard Operating Procedures and Customer Service Standards	15/12/2016
Public Engagement Go Live	9/1/2017
Route Optimising and Resourcing Plan completed	24/2/2017
User Testing - Route optimisation and Resourcing Commences	27/2/2017
Phase one management reshape. Implementation	27/2/2017
Phase two – alignment of workforce Consultation commences	6/3/2017
User Testing - Route optimisation and Resourcing Completes	31/3/2017
Communal Collection Sites completes	27/4/2017
Phase two – alignment of service Workforce. Implementation	8/5/2017
Alternate Weekly Collection Go Live	8/5/2017

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# 21. Key Risk Analysis and Risk Management

21.1. The following represent key risks for the project. A full risk log is included in the Appendix as item H. Waste Collection represents a highly visible element of the Council's provision, and therefore risks are rated in the context of the potential for significant reputational harm if problems occur. At the same time the project team contains members who have significant experience of successfully reorganising waste collection provision, ensuring that the risks involved will be successfully managed.

ID	Description	Likelihood	Impact	Mitigation
WM2016_RSK_01	Alignment of departmental functions around service delivery and prioritisation needs to be fully understood to ensure smooth delivery of project and minimal impact to service provision during the implementation / design phase of the project.	3	3	Ensure departmental requirements and high level processes are mapped and fully understood by project team and department leads prior to creating solutions.
WM_2016_RSK_02	There is a risk that the full ICT requirements are not yet understood for this service - other projects are developing in cab technology as well as smart working devices, which may not take account of these requirements leading to missed opportunities/ more expense.	4	4	Business Analysis needed to understand system requirements and dependencies on other project deliverables.
WM_2016_RSK_03	Requires significant change in customer practice, which may or may not be seen as a positive change by the customer. This will dictate levels of compliance and potential dis-benefits such as fly tipping, contaminated recyclate and additional service requests/complaints to the call centre/ward councillors.	4	4	Research implementation of this scheme at other councils to understand their lessons learnt and develop a continual education and communications plan. Ensure detailed mapping, local knowledge of staff and Ward Councillors informs the siting and communications for this initiative. Trialling and 'finding what works' should be the approach taken.
WM_2016_RSK_04	There is an	5	3	Implementation of the

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	enforcement policy which defines what enforcement action can be taken, but there is a lack of a formalised Waste and recycling policy against which to enforce. Additionally, enforcement action is dependent on meticulous practices and careful gathering of evidence to be successful in prosecutions.  Successful enforcement is an essential component of supporting the required improvement in recycling rates to 40%.			Waste and Recycling Policy which will outline the required of residents and staff Develop enforcement plans as well as training plans for staff. Ensure that Communications and Engagement plan delivers concise and clear information to customers throughout the duration of the project.
WM_2016_RSK_05	There is a risk that benefits identified which are dependent in part on successful roll out of communal bins, may not be realised, as sites of for communal collections 1100 bins are yet to be confirmed, as are numbers required.	4	4	Carry out a survey to assess suitability of installation of 1100 bins, consult with ward councillors, residents and management agencies. Liaisons with highways and relevant partners. Identify areas with high likelihood of success that could be suitable for communal collections from 1100 bins.
WM2016_RSK_06	There is a risk that messages are not clear enough, timely or targeted effectively. This will result in an increase in the number of calls to the Contact Centre/Ward Councillors.	4	4	Gather Lessons learnt from 2015 Waste Collection Rezoning project and other councils ensure that a robust communications and engagement plan are developed to support the delivery of the project. SME's and residents groups to be engaged to ensure buy-in and education and awareness raising information is targeted

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				effectively.
WM2016_RSK_09	There is a risk of antisocial behaviour including fly tipping at the proposed Communal Collection I 100 sites. This will increase the number of remedial collections required/costs incurred through damage.	4	4	Provide continued education and promote successful prosecution cases.
WM2016_RSK_11	The risk is that maintenance and servicing of vehicles is not completed outside of operational hours. This will impact on service delivery as there may be insufficient number of vehicles to complete the work.	5	4	Minimum tolerances of out of action vehicles to be decided established and form a basis for a service level agreement with Fleet Management which drives the requirement for maintenance to be completed outside of operational hours and guarantees minimum number of vehicles are operational.
WM2016_01_RSK_14	There is a risk of insufficient engagement with staff about change in the provision of a cross functional, zonal service. This may result in delays to the delivery of the project and effect services to be public.	4	5	Engagement with codesign of the service, including regular consultation and feedback with staff and TUs.  A communications plan will be drafted to key include key milestones and key engagement stages of the project with a focus on 1:1s face to face briefings for issues to be aired and resolved.  Provide support from HR including change management training and career transition support.
WM2016_01_RSK_15	There is a risk that changing to rounds may increase missed collections by either the resident not presenting the bin on	4	3	Create an education and communications plan for residents that will continue post implementation to ensure changes are

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	the correct day or the collector missing the bin due to not being familiar with the round. This could result in increased requests/complaints to the Contact Centre/Ward Councillors			embedded. Introduce in cab technology to better inform the collectors on the detail of the round. Review missed collection and take appropriate action.
WM2016_01_RSK_16	The modernisation of services is expected to generate savings of around £750k. This may not be achievable, if the assumptions regarding the effectiveness of interventions such as reduction in Assisted Collections arising from provision of Communal Collection Points is over estimated.	3	4	Understand the full scope of the project Set in place risk and issue mitigation plans and ensure stakeholders including sponsor are monitoring benefits.
WM2016_01_RSK_17	If AWC and the other package of interventions does not drive up the rate of recycling to 40% Plymouth City Council will not be meeting its contractual requirements for targets at the Energy From Waste Plant or the MRF. This could result in a risk to PFI credits (£177m)	4	4	The increase required is 7.5% on current levels of recycling, The Amec 2014 analysis of options identified potential for increase of 5-9% by implementing AWC alone. Draft and implement education and communication plan and provide on-going education and enforcement. Monitor effectiveness of education and take action as required.
WM2016_01_RSK_19	There is a risk that we will be unsuccessful in affecting change in recycling practices among the hardest to engage/transient populations in the city. Therefore recycling target of 40% may not be achieved and penalties incurred.	5	4	Engage with the Registered Social Landlords, Private Sector Landlords Forum universities accommodation providers and local residents associations to ensure that key council messages are delivered to and reinforced to residents in transient areas about the changes

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				to the waste collection service and how it will affect them.
PMWSS_01_RSK_20	There is risk that the required investment to resolve longstanding access issues affecting service delivery will not lead to the required improvements in service.	5	4	Ensure that the fleet is able to operate effectively within the city's constraints using the correct blend of vehicles, siting of communal bins and waste bags where no other option is viable. Plan for future increase in service demand, this will include early involvement at the planning stage for new developments to ensure that waste need are designed into plans.
WM2016_01_RSK_23	With an implementation date of 8.5.17, there may be too many changes within a short period of time due to bank holidays. This may cause confusion and impact the success of implementation	4	4	The project to reconsider implementation date.  Consider overtime offer to crews to work May bank holiday.
WM2016_01_RKS_24	There is a risk that contact from customers will initially increase as a result of changes to collections and customers either not realising the service has changed or not complying with the changes or contacting the call centre to request a different service or make a complaint.	5	3	The project will codesign a plan with the Corporate Contact Centre to reduce the impact of customer needing to speak to an advisor though call centre messaging. Create an education and communications plan for residents that will continue post implementation to ensure changes are embedded. Ensure the Contact Centre is resourced to manage the likely increase in waste related calls during the 6 weeks post go live.

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## 22. Assumptions

- 22.1. Option 2 is recommended based on the following assumptions in the business case:
  - Plymouth Citizens will increase their recycling rates by 5-9 % as a result of the range of education, awareness, interventions and introduction of Alternate Weekly Collections of waste.
  - Provision of additional Recycling-on-the-Go receptacles will be effectively used in the city's parks, city centre, waterfront areas, supporting an increase in public recycling of litter.
  - Increased enforcement will be practicable and based on sufficiently robust policy and practices which will enable successful enforcement action.
  - Handheld devices and in cab technology will deliver the required capability for performance monitoring and maintaining the new customer service standards.
  - Citizens will present their wheeled bins kerbside or take waste and recycling to the communal collection point.
  - Increased enforcement will be effective in supporting behaviour change in the areas with persistent noncompliance issues.
  - Collaborative working across the service working in zones around the city will deliver cleaner streets.
  - Enabling supervisors to more closely support the work force ensuring adherence to customer service standards and standard operating procedures will lead to improved service delivery.

#### 23. Communications and Engagement

- 23.1. The Communication and Engagement Strategy is being developed and are approved by the Project Board at its first meeting in w/c 24th October 2016 and is available as an appendix on request.
- 23.2. A detailed engagement and education awareness plan will be presented to Place and Corporate Services Overview and Scrutiny Committee on 7th December.
- 23.3. Citizen engagement is at the heart of ensuring the required behaviour change needed to increase recycling rates across the city. Clear messages which set out realistic expectations of the new service, so that citizens understand how they need to store and present their waste and recycling and how they can assist by complying with presenting and sorting of waste and recycling in accordance with the education and awareness campaigns which will follow.
- 23.4. Plymouth City Council's relationship with a well-established network of friends groups and other interest groups who play a critical role in developing the city's green agenda will be an integral part of the project. The project team will seek to build on the successful engagement model led by the VCSE (formerly Plymouth Octopus Project) as part of the 2014 Waste Collection Re-organisation Project.
- 23.5. A primary objective is to deliver sustainable community engagement and education (including schools education) once the project is completed thus ensuring that the benefits described in this project are sustained and delivered long term.
- 23.6. Initial input form the community has been via the 'Time for Big Decisions consultation August/September 2016. Communication will continue throughout the project, articulating

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progress and celebrating achievements as well as recognising the support of stakeholders in enabling change to take place.

#### 23.7. The planned approach includes:

- Given the scale of change required, a phased approach to messaging which considers the right messages at the right time to support the implementation.
- Opportunities for the public, Members, frontline staff and Partners to influence the project. For example on 31 August and 22 September presentations were made to the Select Committee as well as the Place and Corporate Overview and Scrutiny Committee on the 05 October 2016 to give Members the opportunity to input into proposals.
- Contact with all households for example, via a letter and/or bin stickers, presenting
  information on changes to collection days, policies and good practice in relation to
  recycling
- A poster campaign targeting community venues and locations such as takeaways, libraries, news agents and pubs, with support to implement this provided by Plymouth Youth Offending Team
- A presence at community meetings and venues across the city in the build up to implementation
- Social media campaign supported by partners
- 23.8. Partners will also be targeted through the project's communication plan. Changes may impact on their work, for example a review of assisted collections could affect supported housing or care providers. Alongside this the knowledge and skill set of partners can add value to the Council's work.
- 23.9. Partners can also support the project in disseminating information, for example Plymouth Community Homes and other RSLs. Utilising these opportunities will ensure that the project's communication campaign has a broach reach and operates in the most efficient manner.
- 23.10. Regular updates have been provided to the Cabinet Member and the Leader of the Council. Group party briefing sessions have been held, and there will be further guidance for Members in the build-up to implementation.
- 23.11. The whole thrust of this Plan is that communications and engagement is vital to the success of the project involving Ward Councillors, Managers and scoped staff within each aspect of the service.
- 23.12. It recognises that there needs to clear, consistent and sustained communications with our citizens and that our staff are central to the success of this project.
- 23.13. Clear messaging that demonstrates the value and benefits (both financial and non-financial) to staff whilst also reassuring and supporting more reluctant and less confident members of staff is key.
- 23.14. Staff briefings and engagement will form the backbone of this project to ensure the changes are successfully implemented and the benefits can be realised.
- 23.15. Staff has a wealth of knowledge and expertise on how the service can be improved on the ground. They will be heavily engaged in testing and validating new routes prior to implementation. They will inform development of new standard operating procedures for the cross-functional zonal approach to service delivery. With their knowledge of the city they will provide an essential quality assurance check.
- 23.16. The Communications and Engagement Plan is supported by a dedicated Business Change Advisor who has experience of facilitating the implementation of service changes involving reduction on agency and FTE, changes to staff roles and introduction of new Policy,

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procedures and working practices.

- 23.17. Each scoped service will receive workshops for managers initially followed by workshops for staff. Efforts to understand service requirements from the staff perspective will be key to ensure staff buy in and that we address their FAQs. Thus full engagement will be the key to full buy in.
- 23.18. Feedback will be given to CMT, DMT, Cabinet members, Ward Councillors, Trade Union representatives, other Council staff not in scope and the Project Board on the progress throughout as well as the final evaluation of benefits.

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