

## Good Practice Case Study

# Delivering high performing services at low cost: waste collection in North Kesteven

## Sharing good practice in waste collection

**This case study aims to share good practice amongst waste officers**

North Kesteven District Council's waste collection service provides good value for money. The service performs well; the council's recycling rate is in the top ten nationally and the amount of waste sent to landfill is very low, yet the cost of the service per household is also very low. This case study explores what drives this value for money position, with a focus on particular initiatives or ways of working that have enabled the service to improve performance and keep costs down.

## Summary

North Kesteven is one of the best performing councils in the country for recycling a large proportion of their waste and minimising overall levels of waste produced by households. The authority has maintained a high level of performance over several years, and has been able to build on their performance year-on-year, whilst also ensuring that the service is as efficient as possible.

The council manages to achieve high performance ratings at a low cost per household by:

- **Matching operations to the needs of local area**, for example the three wheeled bin system for residual, garden and recycling waste, implementing alternate weekly collections, ensuring flexibility with crew sizes and reducing garden waste rounds in winter.
- **Developing a culture of continuous improvement**, for example increasing the range of recyclable materials collected, conducting a route optimisation review and developing staff engagement activities.
- **Driving out costs**, for example targeting education/prevention resources to the areas of greatest need, moving customer contact into the customer services function, maximising the value from contracts and reducing staff costs during off-peak periods to reduce agency spend.



## North Kesteven performance: key facts

Residual household waste per household (household waste that is not re-used, recycled or composted) <sup>i</sup>	468 kgs
Percentage of household waste sent for reuse, recycling and composting <sup>ii</sup>	55.7%
Satisfaction with council-provided services (refuse collection) <sup>iii</sup>	83.4%
Satisfaction with council-provided services (doorstep recycling) <sup>iv</sup>	79.6%
Waste collection cost per household <sup>v</sup>	£48.88

## Overview of learning from North Kesteven

Local services should be tailored to meet the needs of local residents. Waste is a particularly good example of this because the environment has a big impact on the way that the service works operationally; the requirements in an urban area with a mixture of housing types are very different from those in a large, rural area like North Kesteven where the challenge lies in the distance that needs to be travelled to reach the more remote households.

However, there are various initiatives that North Kesteven has worked on that could be considered by any waste collection service, whether it is in-house or outsourced, urban or rural:

- **Route optimisation review:** A comprehensive review of operations allowed the council to redesign routes that were more efficient.
- **Flexibility:** The council reduces garden waste collections in winter and deploys smaller crews on some rounds, which reduces staff costs.
- **Customer focus:** The contact centre provides good customer service which leads to high customer satisfaction levels. Communication with residents keeps them informed, so they know when their collection day is and what materials they can place in their recycling bin. This in turn improves performance and reduces the overall level of contact required.
- **Staff productivity:** Waste collectors at North Kesteven operate on a task and finish basis, which can often mean that staff are paid for more hours than they actually work. Rebalancing the rounds and encouraging greater staff engagement has led to increased levels of staff productivity.
- **Generating income:** A key driver in North Kesteven's low overall spend is the level of income they generate from recycling. Other waste collection authorities may already have their recycling dealt with by their disposal authority, but there may be opportunities to generate income in other ways.
- **Contract management:** The council is ensuring they get the most out of their contracts, including extending their vehicle leasing contract to ensure maximum return, and entering into a contract for agency staff to achieve procurement savings.

## About the waste service in North Kesteven

### > Background to the council

North Kesteven District Council was awarded 3 out of 4 overall by the Audit Commission in its 2009 organisational assessment. Compared to other district councils achieving this score, North Kesteven has a low level of relative total net expenditure per head of total population (at £141 per head, the seventh lowest level of spending for councils scoring 3, with the median spend per head for councils scoring 3 at £170).

North Kesteven is a large rural district in Lincolnshire in the East Midlands, characterised by small settlements and large tracts of agricultural land. The population is nearly 105,000, with the majority living in the main towns of Sleaford and North Hykeham and on the outskirts of the City of Lincoln. The population is growing and people are becoming better off.

### About North Kesteven: key facts

Population <sup>vi</sup>	105,700
Population turnover <sup>vii</sup>	600
Number of households <sup>viii</sup>	46,000
Population density: people per hectare <sup>ix</sup>	1.1

North Kesteven District Council works with local partners to improve the quality of life, economic performance and environmental sustainability of the district. Five priorities for improvement have been agreed. These are:

- Community Wellbeing
- Managing Change
- A Sustainable Future
- A Vibrant Economy
- Better Transport

The waste collection service plays a key role in contributing to the sustainable future agenda by raising awareness about the need to reduce, reuse and recycle waste, encouraging residents to dispose of their waste in the most sustainable way, and also leading by example, for instance by making routes as efficient as possible so that fuel consumption is reduced.

### > The waste service in North Kesteven

Compared to other authorities in the East Midlands and nationally the waste collection service in North Kesteven offers relatively low costs per household and a high level of performance. Recycling rates are in the top ten nationally, the amount of waste sent to landfill is well below average and resident satisfaction with waste collection and doorstep recycling is also above average. The council introduced recycling in 2001 and very quickly became a high performing service. Over the past decade the collection methods have changed to drive down costs and gradually improve performance, such as the introduction of wheeled bins, the garden waste collection facility and alternate weekly collections.

## The waste service in North Kesteven: key facts

Type of collection service <sup>x</sup>	Zone collection
Average number of residential properties collected from daily	9,500
Average number of bulky waste collections per week	5
Bulky waste charges	£6.30 for up to 3 items and £12.85 for up to 6 items
Recyclate collection method	Mixed collection for paper, card, glass, plastics and cans. Garden waste also collected.

## What makes the service good value for money?

**What is North Kesteven doing differently that results in their value for money position?**

### > The Environment

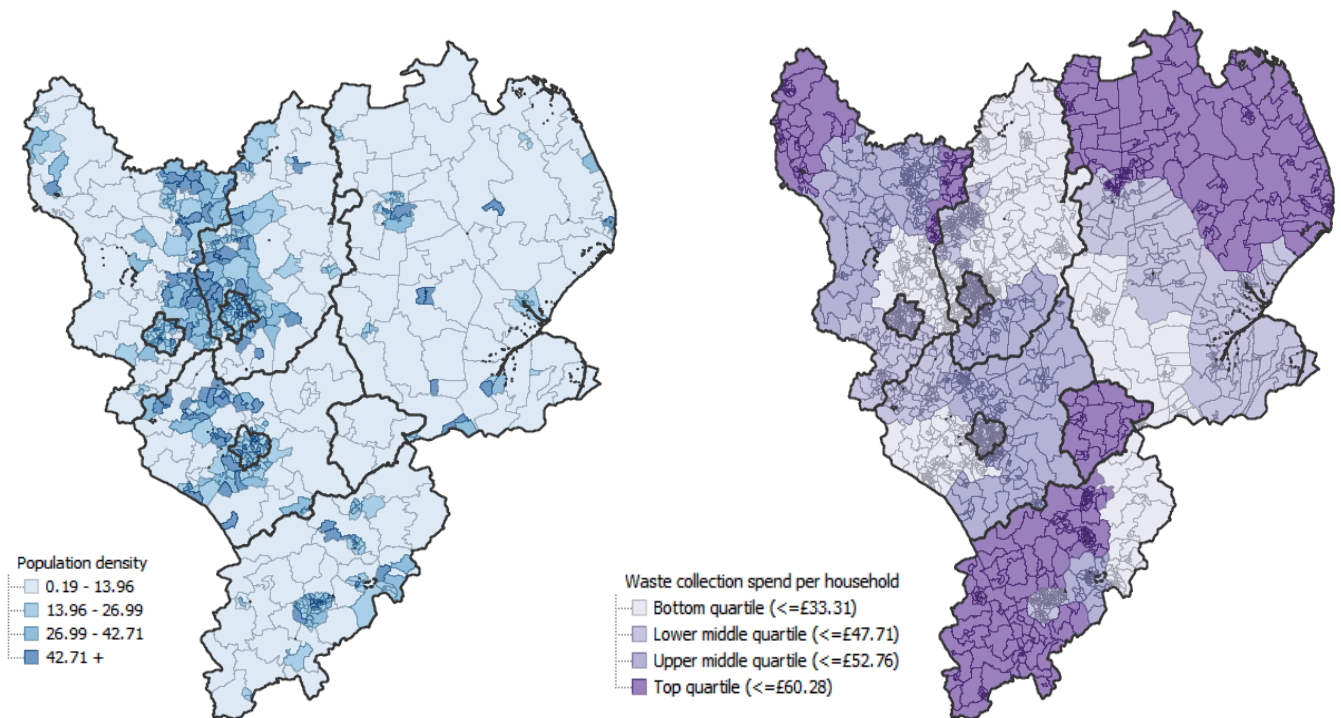
**How does the environment in which the service operates impact upon spend and performance?**

A local authority does not have direct control over its environment, but there are opportunities that can be exploited to best effect, and challenges that can be overcome or at least controlled, as these examples demonstrate.

There is no strict correlation between spend on waste collection per household and population density across the councils in the East Midlands; some of the authorities with a relatively low spend per

household are fairly urban whilst others are very rural. However, there is a tendency for more rural areas to be more expensive. As the maps below demonstrate, Rutland and parts of Northamptonshire and Lincolnshire are among the most rural areas but comparatively high spending, perhaps due to distance travelled and the complexities around access to households. However, whilst North Kesteven is a large rural district, their spend per head is below average which suggests that the service provides good value for money.





Comparison between population density and relative spending per household in the East Midlands

The authority ensures that operations are matched to the local environment so that the waste collection service provides good value for money:

- Type of bin used:** Over 95% of the residential properties in the area are houses. The council has selected waste bins that suit this type of housing and operates a wheeled bin system. As almost all the properties are houses there is space to store the wheeled bins for collection from the front of the property, whereas other property types such as flats might require different waste bins. The council provides three wheeled bins for residual waste, recycling and garden waste for the vast majority of the households, meaning they are using the same collection methods and vehicles across all their rounds. This ensures consistency across the service and helps keep costs down, as staff and vehicles can be deployed flexibly and it is not necessary to own and maintain several different vehicle types.
- Adapting rounds for rural areas:** North Kesteven is a large and very rural district, aside from the main towns of Sleaford, North Hykeham, and the area around Lincoln. The area is split up into five zones for route planning, but the council also operates two rural routes which cover approximately 1,100 properties. This represents less than 3% of the households in North Kesteven, and is an efficient way of ensuring that these properties are reached whilst using staff time appropriately. The two routes operate with just a driver, so that regular crews with a driver plus two loaders do not spend a long time driving to reach these isolated properties.

- **Location of disposal site:** The authority is fortunate to have a disposal site located centrally in the district, so that although the area is large, no collection start/end points are exceptionally far from the disposal site. The authority has made effective use of this when planning their rounds, opting for an approach that divides the district up into five zones in a 'hub and spoke' formation.
- **Recycling facility:** The authority has also developed a close working relationship with the private recycling facility close to the district. They have had a positive impact on their recycling performance as well as providing a source of income. However the location of the facility presents a challenge as it is not located in the district which results in longer trips for the disposal of recyclates.
- **Compost facility:** Within the district are two compost facilities located at convenient points. Given the rural nature of Lincolnshire a substantial amount of garden waste is generated and these facilities enable the volume to be handled efficiently.

## > Operations

### How does the service operating model work, and what impact does this have?

North Kesteven operates an in-house waste service with alternate weekly collections. This is key to keeping costs down whilst maintaining performance levels:

- **Alternate weekly collections:** The council collects residual waste and recycling/garden waste on alternate weeks, which has proved much more cost effective than weekly collections. Alternate weekly collections not only reduce costs, but also encourage residents to minimise their waste and to recycle as much as possible. When the scheme was first established, residents were provided with 240 litre wheeled bins for residual, recycling and green waste, whereas new houses are now provided with smaller 180 litre residual waste bins to further encourage waste minimisation. Larger 360 litre recycling bins are also available at a small one-off charge of £16.65, which is subsidised by the council to further encourage recycling, and the County Council provides reduced price compost bins, water butts and a guide to home composting to encourage residents to reduce their garden waste.
- **Reduction in garden waste collections during winter:** The council now reduces green waste rounds in winter when there is very little waste presented. Crew sizes are reduced from a driver plus two loaders to one driver plus one loader, and collections take place monthly rather than fortnightly for four months over the winter. This was developed in consultation with residents who have accepted the change, and when it was first introduced in Winter 2009/10 the council was able to almost eliminate agency staff costs. This was especially useful over the Christmas period, when holiday cover could be provided from existing staff rather than needing to call in agency staff. The council was also able to use the extra time to invest in their staff and hold staff training sessions.
- **Route review:** North Kesteven recently conducted a route review to drive out efficiency savings from their operations. They hired a specialist consultancy firm to work with them using software designed for the task, and were able to redesign the routes from scratch. A key factor in the success of the reorganisation was the collaborative approach that was taken, involving a combination of data analysis, local knowledge and engagement with the collection crews to produce a final set of routes that really worked. The review has rebalanced rounds, allowed room

for housing growth and reduced the mileage travelled by collection vehicles. This has resulted in fuel savings of 20,000 litres per year, as well as the associated vehicle maintenance and leasing costs which are based on mileage. Most importantly, the changes have delayed the need for a costly additional round to be introduced due to housing growth for up to five years, which would have cost around £250,000 per year.

There have also been some non-financial benefits; the zoned approach means that contingency plans can be implemented more quickly if a vehicle breaks down, as there will be other crews working close by. The optimised routes are more fairly balanced so that all crews work similar length shifts. The reduced fuel bill also helps to reduce the council's carbon footprint.

***“15% of the council's efficiency savings last year came from the route review.”***

Mark Taylor  
Head of Regulatory Services

- **Communications with residents:** Waste is a high priority service in North Kesteven. Residents demand a good service, which means that waste collection comes high up the political agenda for Members. Collection crews are required to provide customer service on the frontline, whilst customer service staff in the contact centre have a good working knowledge of the waste service.

The council believes that the success of the changes they have made, such as the round changes (which meant changes in collection days and bin combinations for residents) or the reduction in the garden waste service in winter, is down to strong communication with residents. A good example of this is the magnetic calendars that are provided to residents; the calendars clearly show the collection days for each type of waste for each household. This simple but innovative idea ensures that residents feel well informed and understand when to put which bin out for collection, and reduces the number of customer service queries received.

- **Range of recyclables collected:** A key factor in North Kesteven's high performance levels is the sheer range of waste for recycling that they are able to collect. This is due to the relationship they have with the local material recovery facility (MRF), with whom they have worked over several years to develop their capacity for accepting a range of materials. The council collects glass, paper, card (including Tetra Pak cartons), tins/cans (including aerosols), foil, clothes and shoes and a range of plastics including carrier bags. These are all placed in the recycling bin for sorting at the MRF. This makes it very straightforward for residents to recycle as there is only one bin for these items, and the council promotes the slogan “if in doubt leave it out” to avoid contamination.

## > Staff

### North Kesteven staff: key facts

Total number of staff involved in waste collection <sup>xi</sup>	49 (drivers/loaders)
Number of managerial staff	4
Number of operational staff	4
Typical shift length	6.5 hours
Number of rounds per week	5
Number of trips per round (average)	2
Number of staff involved in enforcement	1 manager and 2 operational staff

### What is the staffing structure & how is the service managed to provide good value for money?

The council operates a lean staffing structure, and this contributes to the efficiency of the waste collection service. The structure is quite flat; management consists of the Unit Manager who reports directly to the Head of Regulatory Services and is supported by a Supervisor who is responsible for day-to-day operational management of the staff at the depot. There are only four other members of staff who work in the back office; one administrator and three operational enforcement officers. The remaining 45 members of staff are all drivers and loaders. This lean back-office structure ensures that staff resources are directed to frontline delivery of the service.

***“We promote a value for money culture. We aim for continuous improvement, cost reduction and innovation to ensure we provide a good, efficient service.”***

Alan Thomas, Deputy Chief Executive and Director

There are several ways in which the council's approach to staff management ensures that the service remains low cost:

- **Flexibility with crew sizes:** The standard crew size is a driver plus two loaders, which works well across the majority of the district. However, the two rural routes which cover very large areas but only collect from around 1,100 properties operate with just a driver. Also, crew sizes for garden waste rounds are reduced to a driver plus one loader in the winter when the amount of waste presented drops. This flexibility with crew sizes ensures that staff and resources are efficiently deployed.
- **Balance between permanent and agency staff:** The council has achieved a careful balance between permanent and agency staff that allows for flexibility and reduces overall costs. The council employs 45 drivers and loaders, but this deliberately does not cover the full staffing requirements at peak times or when there are staff holidays or sickness. During peak times, especially the summer months, up to 20% of the frontline workforce may be agency staff. However, the requirement for agency staff is greatly reduced during the winter months when the garden waste service is reduced to monthly collections. The flexibility of using agency staff means that during this period the council can simply stop using agencies and greatly reduce their staff costs for a several months of the year.

- **Improving staff satisfaction:** The council has taken several measures to ensure that staff are engaged with what is happening with the waste service and across the council. For instance, members of the council's senior management team have visited the depot to explain the impact that recent efficiency drives will have on the service, and crews were consulted as the new route system was developed, not only to create "buy-in" to the changes but because their operational knowledge made a valuable contribution to the process. Monthly staff bulletins ensure that everyone is kept up-to-date and informed.

The council is also keen to deliver more staff training and is currently agreeing protocols with the unions for this. The waste service has also been working with Occupational Health to improve the working environment for the crews, for instance ensuring that protective clothing is worn when necessary, or that water and sun cream are available in hot weather. Initiatives such as these make sure that staff feel engaged with the council and more satisfied with them as an employer. This has a positive knock-on effect on the performance and efficiency of the service; happier staff are less likely to be sick, staff turnover is reduced and improved staff morale results in better levels of productivity and customer service.

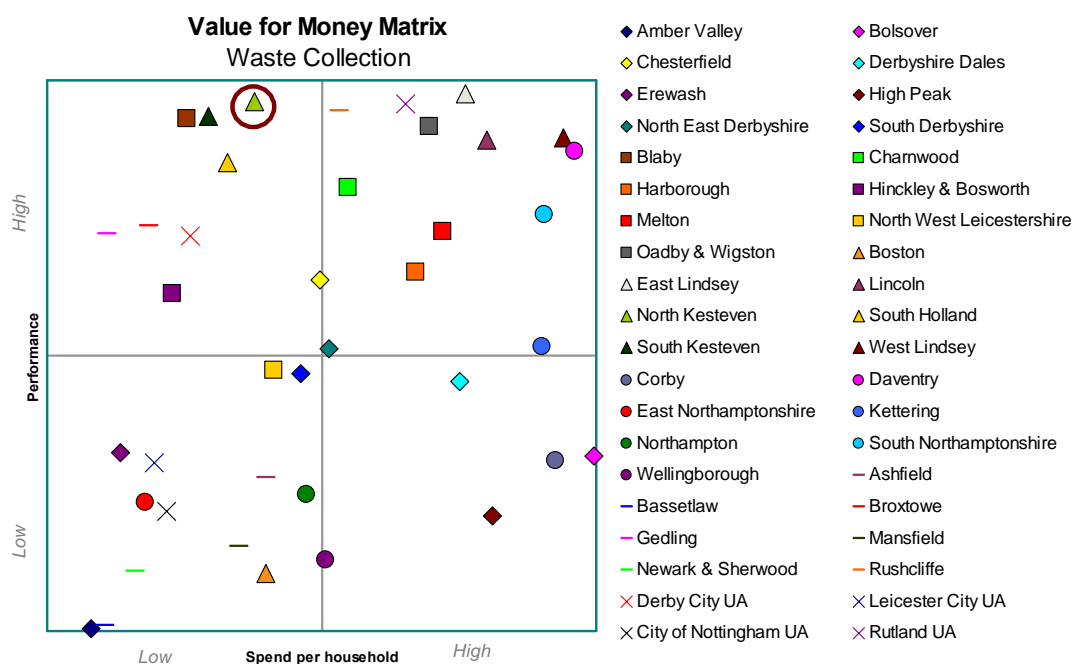
- **Making the task and finish approach fairer:** Collection staff at North Kesteven work on a 'task and finish' basis. However, this can result in large variances in finish times between the different rounds and waste types. When the council implemented the new routes they took on board feedback from staff about the variances in finish times and introduced a staff rotation system. This means that staff rotate between rounds every three months, which evens out any remaining inequalities between crews. This has boosted staff morale because the crews believe that this is much fairer approach.

## > Resources

North Kesteven resources: key facts	
Gross annual expenditure for collection of residual waste and recyclates <sup>xii</sup>	£2,887,411
Total amount spent on staff	£1,095,944
Total amount spent on plant and vehicles	£798,578
Total amount spent on overheads	£692,754
Total amount spent on Civic Amenities, or Household Refuse and Recycling Sites	£300,135 (gate fees)
Income from bulky waste collection	£13,045
Income from sale of dry recyclates	£437,959
Number of vehicles	16 wheeled bin loading refuse collection vehicles, 1 cage vehicle and 3 box vans
Number of refuse receptacles	At least circa 140,000 wheeled bins in the district based on current household figure of 46,568
Number of depots	1

## How does the authority's use of resources impact their overall spend and performance?

For the purposes of this case study, we examined the authority's accounting methods. All three authorities that we have looked at account for elements such as overheads in a similar way, which suggests that their value for money scores are due to genuinely low spend and efficient resource management, rather than different approaches to allocating resources. The matrix below highlights North Kesteven's performance and spend in comparison to the other authorities in the East Midlands.<sup>xiii</sup> North Kesteven is placed in the "value for money" quadrant, because their performance is high and their spend is relatively low.



East Midlands value for money matrix for Waste Collection (North Kesteven ringed in red and black)

The way in which North Kesteven manages their finances and resources has a significant impact on the overall cost of the service:

- **Staff:** Staff costs account for the highest proportion of spend (38% of expenditure), and the council works hard to maximise staff productivity, as described above.
- **Vehicles and plant:** Vehicles and plant account for a further 28% of expenditure, and the council aims to run their fleet as efficiently as possible. For instance, North Kesteven leases its vehicles on a contract hire and maintenance arrangement, rather than purchasing outright. In order to generate additional efficiency savings, the council is now considering extending the lease period to 7 years on their contract for their current fleet as the vehicles are in good repair and this could reduce ongoing costs.

- **Overheads:** The council apportions overheads to the service in a standard way, with recharges from corporate services such as IT and customer service based on volume of work created (e.g. the number of calls relating to the waste service received by customer services). Overheads account for almost a quarter of expenditure, so the council ensures that their spend on elements such as customer service results in a high quality, cost effective service to customers (see below).

There are several ways in which the council manages its resources to make the service more efficient and effective:

- **Income generated from recycling:** North Kesteven generates a significant amount of income from the difference between the gate fee and associated recycling credits. The council disposes of recycling waste via a private recycling facility located close to the district, rather than via the disposal authority, Lincolnshire County Council. This arrangement generated income of £438k in 2009/10, equating to income from recycling of £10.19 per household, almost two-thirds of the overall income per household of £16.67 (which includes income from charges for bulky collection, other waste collection charges and grants). This significantly reduces the overall cost per household; spend per household is £65.56, but the level of income generated reduces the overall cost by around 25% to £48.88.
- **Customer enquiries dealt with by the contact centre:** North Kesteven has transferred customer contact for waste to the contact centre, which helps to reduce costs whilst improving customer satisfaction. Customer service staff are able to deal with all the common waste enquiries or issues, such as reporting missed bins, requesting a new bin, requesting bulky waste collection or enquiries about collection days. The council operates a free 'waste hotline' telephone number, and it is also possible to report a missed bin or check your bin collection day online. The handover between the front and back office is streamlined with the relevant information transferred directly into the council's customer relationship management system (CRM) to avoid any double-keying of data, and customer service staff are able to confidently assure customers that issues such as missed bins will be resolved within a fixed timescale due to the waste service's target turnaround times. Scripts for customer service staff were developed in conjunction with the waste service to ensure their accuracy, and the two services work closely together so that both waste and customer service staff are aware of any issues or changes.



North Kesteven believes that this arrangement is cost-effective; the customer service recharge costs less than employing a waste officer to deal with customer enquiries. In addition, customers receive a better service because they are being dealt with by customer service specialists, and there are also opportunities for adding value, for instance when new residents call to enquire about collection schedules, they can also register for council tax at the same time.

- **Targeted education activities:** The council does not have a large budget for education and prevention activities, but it ensures that the resources it does have are targeted appropriately at the areas of greatest need. For instance, the council employs a Sustainability Officer who works across the council to reduce the council's carbon footprint and encourage sustainability through energy efficiency, waste minimisation and recycling. This allows the council to promote a joined up message about "going green" across various services, and also spreads the cost. The council already enjoys high rates of recycling and low levels of residual waste, so it makes little sense to invest lots of their resources in an area where they are already successful. The council is therefore focusing on maintaining general performance levels whilst focusing on a few problem areas. For instance, they are currently working with the RAF base to improve on their low recycling rates, and they have targeted one round where recycling levels are poor and are investigating the reasons for this through customer consultation.
- **Removing loss-making trade waste service:** North Kesteven no longer operates a trade waste service. When the council moved to alternate weekly collections and rationalised their routes and collection methods it became necessary to make separate collections for trade waste on the weeks when garden waste was being collected. This would have been highly inefficient and resulted in a loss for the council, so this service was sold off.

## Future challenges and opportunities

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North Kesteven's waste service has developed a track record for high performance, but the council is aware that changes are on the horizon which will bring new challenges, but also new opportunities:

- **Efficiency savings and budgetary pressures:** Public service providers face a serious challenge in the current economic climate; they must meet rising expectations and continue to improve services despite increasing pressure on resources. District authorities will need to make a significant contribution to the broader efficiency drive across the public sector, as a large area of spend for district councils, waste will naturally come under scrutiny. For a service that is already lean, the pressure to drive out further efficiency savings will be challenging and will push the authority to make difficult decisions about how best to direct their resources.
- **Continuing to improve performance:** It is always challenging to continually improve on an already high performing service, and this will be made even more challenging by the pressure on resources as although there is always room for improvement, there will no longer be room for improvement at any cost. Councils will need to reduce spend in ways that do not have a detrimental impact on performance, perhaps by exploring new ways of delivering the service such as through greater collaboration or shared services.

- **Energy from waste plant:** Lincolnshire County Council is building an energy from waste plant within the district, on the outskirts of North Hykeham. This is a great opportunity and should dramatically reduce the amount of waste sent to landfill by turning the waste that cannot be recycled or composted into energy. This will involve the relocation of disposal and transfer sites and will require collection routes to be redesigned, although by the time work is completed in 2013 the routes will be due for renewal due to housing growth.



North Kesteven aims to promote a culture of continuous improvement within the council, and is looking forward to exploring various initiatives that could make the waste collection service more efficient and effective. These vary from partnership working, using greener fuels for vehicles, addressing sickness absence amongst staff and technology solutions such as in-cab monitoring systems.

## References

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- II. NI 192, 2008-9
- III. Place Survey Q8b, 2008
- IV. Place Survey Q8c, 2008
- V. Revenue Outturn 2008/9 (waste collection) / ONS household population mid-year estimates 2008
- VI. ONS mid-year 2009 population estimates
- VII. ONS mid-year 2009 population estimates
- VIII. ONS household population mid-year estimates 2008
- IX. ONS mid-year 2009 population estimates / Size of area in hectares, ONS Census 2001
- X. All waste service data provided by North Kesteven Council, October 2010
- XI. All staff data provided by North Kesteven Council, October 2010
- XII. All resources data provided by North Kesteven Council, October 2010
- XIII. Waste Collection defined by expenditure under 'Waste collection' in the Revenue Outturn return. Performance information drawn from resident satisfaction with waste collection and doorstep recycling, and residual household waste per household.



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