

RIBBLE VALLEY BOROUGH COUNCIL REPORT TO COMMUNITY SERVICES COMMITTEE

Agenda Item No. 11

meeting date: 13th MARCH
title: INCREASED COSTS FOR REFUSE VEHICLE MAINTENANCE
submitted by: J. HEAP, DIRECTOR OF COMMUNITY SERVICES
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1 PURPOSE

- 1.1 To advise members of a possible trend suggesting that the cost of refuse vehicle maintenance has increased and the steps being taken to address the issue.
- 1.2 Relevance to the Council's ambitions and priorities:
 - Community Objectives – To sustain a strong and prosperous Ribble Valley
 - Corporate Priorities – To ensure best use of council resources in the provision of refuse collection and recycling services.

2 BACKGROUND

- 2.1 In 2015/16 the overall budget for maintenance of the refuse fleet was underspent by £60,149
- 2.2 In 2016/2017 there was a marked increase in the costs resulting in an overspend of some £81,708
- 2.3 In 2017/2018 there is an overspend to date of approx. £119,719
- 2.4 The existing fleet comprises 2 paper wagons in their 11th and 12th year (to be replaced 18/19 and 19/20).
The remaining 8 refuse collection vehicles are on an 8 or 9 year replacement programme.
The Garwood (a small single body refuse vehicle), dealing with special collections, and trade waste is in its 13th year and is constantly in use, an order has been placed for its replacement and that is expected mid 2018
The last vehicle in the fleet is a caged pick up in its 8th year dealing with special collections and bin deliveries. (to be replaced 18/19).
- 2.5 The Refuse Collection Vehicles have been chosen for size of payload and optimum round efficiency. Larger vehicles would restrict access as discussed later in the report. Smaller vehicles would preclude completion of the rounds.
- 2.5 The number of domestic properties at the end of March 2015 was 25528 and 324 trade customers.
Currently the number is 26278 and we have 630 trade customers

3 ISSUES

- 3.1 The Refuse Collection vehicles are 70/30 split bodied. We collect residual in the 70% side whist collecting comingled glass, cans and plastic or green waste on alternate weeks in the small side. The compacted glass is particularly aggressive and grinds all the sheet metal surfaces of the hopper that then need to be replaced by specialist steel fabricators.
- 3.2 On the back of the split bodies are the 3 bin lifters. The cost of the parts for the replacement bin lifts is £1953 for each lifter and need replacing/fabrication every 2 years, some of the vehicles presently have refurbished bin lifters taken from replaced vehicles from 2007/2008
- 3.3 Two of the RCVs were purchased late 2013 and have had to have their hopper and packing mechanisms replaced this year at a cost of £11000 each by the main dealer in Scotland.
- 3.4 From 2013 all Terberg binlifts are fitted with a new version of safety arm to comply with EU regulations. Each vehicle has three arms fitted each one having eight separate parts at a combined price of £840.54 per arm
Previous models had a piece of red plastic which we cut from a large sheet at a cost of roughly £25.
- 3.5 The current Euro 6 emissions standard for all vehicles, after 2014, is extremely expensive adding £10,000 to the purchase price of a new truck alone. The engines have to be regularly regenerated which takes roughly 1.5 hours with the truck parked up and running at high revs and very high temperatures. If this does not sufficiently cleanse the system a specialist has to attend the vehicle to force regenerate the engine (at a cost).
- 3.6 Vehicles from 2010 are controlled completely by Electronic Control Units (ECUs) there are 6 or more in the body, 2 each on the Bin Lifters and over 10 on the Chassis. Any problems with these have to be directed straight to the specialist operators.
- 3.7 Now that all new vehicles have gone to digital control systems and a plug and play operation the only way to fault find and diagnose is by the use of laptops and specialist programmes controlled by the manufactures (in just the same way that your car is) The hardware of the systems however can be replaced in house but then have to be programmed to that particular vehicle.
All HGVs since 2014 are being fitted with a multitude of new mandatory safety devices to improve road safety and all come at a price, Electronic Stability Control, Advanced Emergency Braking Systems and Lane Departure Warning Systems to name but a few.
- 3.8 The use of Adblue (used to reduce emissions) is fitted to all Refuse Collection Vehicles now and some other vehicles also. We are currently using roughly 4000 litres a year at a cost currently of £300 per 1000liters. Newer vehicles are using this at higher rate also due to the Euro 6 emission standards.
- 3.9 The use of technology does not stop with the vehicles primary functions. The use of all round vehicle CCTV, trackers and other telematics require regular maintenance and monthly fees for sim cards etc.

- 3.10 All the RCV fleet are now required to use a much higher quality Coolant and this is some £555 a barrel more than the standard anti-freeze (£229 per barrel) used in pre 2012 vehicles.
- 3.11 The use of Twin Pack vehicles increases maintenance costs, purchase costs and running costs are also very high due to the fact the vehicles are much heavier than single bodied versions and contain double the parts.

Measures taken to reduce costs:

- 3.12 Evidence of our diligence to control costs: Parts are expensive not always readily available and back up is borderline/non-existent. Recently a vehicle lost all hydraulic pressure. Whilst initially this was thought to be the hydraulic pump (£3000 to replace) after making contact with a specialist South African engineer (over the phone) the fault was repaired in house for the cost of 2 small O rings costing 10 pence and the price of the phone call.
- 3.13 Parts are becoming more expensive it seems by the day, we have tried and continue to try to source parts elsewhere but this is not always possible due to parts availability, excessive lead times or poor quality aftermarket parts particularly on safety critical items.
- 3.14 We continue to look at ways to keep repair/running costs down. Our latest efforts being to have the tracking of the steering axle checked and corrected regularly, this is needed due to the poor conditions of the roads and vehicles still going on many unmade private tracks.
Hopefully this will save on heavy wear to front and mid axle tyres with the added bonus of a small saving in fuel. Preston Council, for one, are presently considering no longer collecting along private drives/lanes as this is adding wear to the vehicles and creating claims from the track owners on the council for damage.
- 3.15 In conjunction with Dennis Eagle, we have been developing a retro fit system that will allow us to use the lift axle mechanism in a more efficient way, again giving a saving in tyre wear and fuel usage.
- 3.16 Binlift and Body fabrication have been partly done in-house but without the full range of fabrication equipment needed it is impossible with the newer type bodies (bodies no longer have straight panels, they are all barrel shaped which require sections to be rolled to shape and internal panels which also need shaping to match the curve).
- 3.17 The latest round of body and binlift fabrication has been done by Castle Sheet Metal in Sabden, they have machined binlift parts to accept new bushes and grease nipples this should reduce costs and allow cheaper repairs in the future. Binlifts are subject to LOLER regulations and as such are inspected by Terberg (Manufacturers) annually and by Zurich Insurance engineers annually, any defects must be rectified within the timescale specified or it cannot be used. Heavy wear on binlifts, if not rectified, has the knock on effect of causing damage to wheeled bins – another cost to Refuse Collection.

- 3.18 The last split bodied vehicle we had the hoppers refurbished on was done at Castle Sheet Metal, they also did extensive work on the binlifts to comply with LOLER regulations at a cost of £2689. A similar vehicle went for similar work at Dennis Eagle in Manchester and cost over £6000 in year 15/16

4 RISK ASSESSMENTS

4.1 The approval of this report may have the following implications:

- Resources – Refuse collection is possibly the Council's biggest service and is the single biggest cost.
- Political – Ribble Valley residents value this service highly and we believe there is a strong desire for service levels to be retained.
- Reputation –The Council has a reputation for careful management of resources and a single year's overspend could be put down to bad luck or exceptional circumstances. A second year's overspend (projected) has triggered a detailed analysis so that measures can be taken to reduce the impact and identify and address the root cause. This is a timely, proportionate and appropriate response.
- Equality & Diversity – No issues arising as a direct result of this report.

5 CONCLUSION

5.1 The effect of housing development in the Ribble Valley is putting a strain on the fleet with double the amount of trips to Longridge alone. The current quality of the roads is a real issue causing blown air suspension bags or broken springs and tyre damage due to pot holes etc. The lack of verge maintenance ie over growing trees in combination with bigger vehicles is also causing damage to parts higher up on a RCV

The current fleet is able to cope but moving forward newer vehicles become more complex/heavier resulting in reduced payloads and more access issues due to extra size.

There are 8 RCVs in total with 7 refuse rounds. All vehicles have to be maintained correctly and safely and in accordance with the O licence. Failure to do this would lead to prosecution but could result in loss of life.

6. FUTURE STEPS

6.1 A report is being prepared outlining the likely out turn for this year's spend, the likely spend for 18/19 and alternatives to the current method of working for the Corporate Management Team meeting 14th March 2018.

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