

# New study shows fortnightly collection can increase recycling

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A new study from the University of Southampton, which investigated the controversial alternate weekly collection (AWC) system for residual waste and recyclables, has found that a switch from weekly to fortnightly collection increased recycling rates by up to 9 per cent and reduced collection costs.

Although the majority of local authorities in England and Wales currently operate AWCs, their impact on recycling rates and waste reduction hasn't been monitored before. There has also been [political opposition](#) to the scheme, with the communities department (DCLG) providing a £250m three-year fund to encourage councils to maintain or revert to weekly collections. ([ENDS Report 455, December 2012, pp. 18-19](#)).

Professor Ian Williams, from the University's Centre for Environmental Sciences (CES) led the study which is the most comprehensive that has been completed on AWC systems. It compared what happened in Lichfield, Staffordshire, when the district council switched from collecting commingled dry recyclables from around 2,000 households once a week to once every fortnight. The collections alternated with separate collections of residual waste and kitchen/garden waste.

Single and dual-stream household waste collection trials were conducted between March and June 2009 in Lichfield and compared to previous kerbside collection. The single stream collection method required residents to place all recyclables into one 240-litre wheeled bin, while in

the dual stream method residents placed glass, steel and aluminium cans, and mixed plastics in a 240-litre wheeled bin and used the existing recycling boxes for paper and [cardboard](#).

The trials examined changes to frequency of collection, type of container issued, amounts of sorting required of residents, household participation and productivity levels. A survey of households was completed before any changes were implemented.

Professor Williams says: "This study has clearly shown that the adoption of an AWC scheme positively impacted on recycling rates and household behaviour, with no obvious adverse impacts on public participation, household waste arisings, public health or the local environment. Participation and set-out rates and operator productivity levels also showed an increase during the trial period. The findings are embarrassing for Mr Pickles and the Government, as it highlights that their current policies are at odds with the evidence."

Over the three months, the dual stream performed better than the single stream, collecting an average of 5.94 kg/hh/week compared to an average of 5.63 kg/hh/week, while the single stream system showed a greater increase in the weight of material collected (0.53 kg/hh/week vs. 0.48 kg/hh/week). However, although the study found that the dual stream produced consistently more recycle per household, it had several disadvantages. These included higher costs in terms of staff time and vehicles, greater complexity in explaining to householders, more difficulty for collection crews to manage, and more manual handling of boxes which was likely to increase staff health and safety concerns.

After the trials concluded, Lichfield decided to roll out the single stream fortnightly recycle collections in wheeled bins to all areas, achieving reduced collection costs and greater recycle collection.

Provided by University of Southampton

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