Re-routing

The responses to questions are a composite of session responses and paraphrase from the discussions and available guidance.

Question	Answer
How much does a typical re-routing exercise cost if going to source a supplier?	The costs will vary according to the numbers of services being looked at, the quality and abundance of data available, the complexity of the areas in scope including area traffic restrictions and the support model needed.
Do you buy or license the tool? Do you need consultancy support with that? Or can you do the calculations yourself?	The tools available for routing analysis are complex and take time to develop skills in. The more popular service model tends to be with licensing the tool and using technical support. Some Councils have bought tools or licensed them but this requires dedicated staff resource and training. More councils tend to use a consultancy model approach given the demands on their staff.
Where we are doing the service in-house what staff resources do we need and what particular skill sets?	Regardless of whether using a licensed tool or locally developed calculations a mix of skills is needed in a team. These include having local knowledge, experience of operational service delivery and good analytical skills. Making decisions on how services should be delivered also means a team leader will need to be involved.
How long does a typical re-routing exercise take from start to finish?	It depends on the number of services being assessed and the quality data available. But from the point of when resources are available to focus on the work it can take between 1month to re-routing a single service to 3 months to complete the whole service as an exercise. Where days need to be changed following the analysis there may be further decision points to be achieved.
Should we re-route one service like food waste or do all the services at the same time?	Ideally all the services should be looked at the same. This is because waste and recycling services are inter-related and waste flows diverted from one stream affects the other service in participation rates or tonnage collected.
Does re-routing look at different crew sizes or do I select those?	The number of crew per vehicle are normally selected as a scenario. Crew sizes affect the rate of containers emptied and influence operational delivery cost and so the outputs need to be reviewed and compared.
How are pick up rates calculated? Or are those industry standard values that are inputted into the calculations?	The collection rates are calculated differently in each model but are a function of the model assumptions and local data used including estimates of future householder participation rates. In some tools standard pick up rates are used but it's advised

	these are reviewed as to whether they are appropriate for the service you want to consider for your area.
If I can't use a re-routing tool what advice have you got for me to use estimates of reasonable round sizes for my particular area?	Consult with Local Authorities that are similar in profile to your own to sense check expected pass rates for new services. Understand the properties served per hour that Councils are services against a relative participation rate and with regard to the tipping off distances involved. The Kerbside Costing Tool on the WRAP LA Portal has indicative round sizes for different scheme types across different ruralities.
How often should we review and update our collection rounds?	Routes should be monitored every year to check for completion times and ensure rounds are fairly balanced. Routing should be updated whenever a new service is added, if the tippoing off point is to change or participation has or is increasing. With several Councils looking at merging services the route efficiencies will need to be reviewed in advance.
Any thoughts on how communals/flats should be looked at in terms of re-routing?	Communal properties have different resource implications dependent on where the collection point is located, the type of containers used and the number of dwellings per estate. So it's vital undertake a review of site characteristics with staff who have good local and operational knowledge and decide whether they should be included within the kerbside routes or a standalone dedicated service.
What impact does having liners do to round sizes for food waste collections?	Liners tend to increase participation and so the round sizes of food waste collections will need to be reduced compared to those that do not supply.
If we changed our dry recyclable containers what sort of impact could that have on the collection rounds?	The type of container provided to households can dramatically change the collection round size. For example, wheeled bin collections are slower than sack or box collections due to the extra time associated with collecting, moving, their empty and return. The additional time results in smaller round sizes for wheeled bin service and where there are multiple containers to return.
If we don't know the future yield or performance data needed where can we source the information from?	You should consult with similar Local Authority profiles and check the WRAP LA Portal for indicative performance values. Re-routing contractors will also have useful data derived from the types of services they've helped introduce previously
What impact will changing residual waste have on my food or dry recyclable round sizes?	Restricting residual waste by frequency or capacity of container tends to increase participation in food and recycling collections. Higher participation levels will increase the crew workload and necessitate the reduction in food waste and recycling round sizes, with more tonnage diverted from the residual waste stream.

Further questions were asked within the session and are available in the recording.

Key links for further information

Content	Link
WRAP guidance on route optimisation	Route optimisation guidance | WRAP - The Waste and Resources Action Programme