

Estimated Mileage Impact of the Waste and Recycling Collection Proposal

Calculation based on estimated weekly averages

		Existing Services					Proposed Services				
		east	north	south	west	Wiltshire	east	north	south	west	Wiltshire
1	number of households	32200	56000	50100	56600	194900	32200	56000	50100	56600	194900
2	number in garden waste collection	9700	8500	5500	53800	77500	30600	53200	47600	53800	185200
Estimated number of households served <u>each week</u> by:-											
	residual collection	16100	56000	50100	28300	150500	16100	28000	25050	28300	97450
	plastic bottles and card			25050		25050	16100	28000	25050	28300	97450
	black box	16100	28000	25050	28300	97450	16100	28000	25050	28300	97450
	garden waste	4850	4250	2750	26900	38750	15300	26600	23800	26900	92600
	total	37050	88250	102950	83500	311750	63600	110600	98950	111800	384950
	check					311750					384950
	Percentage change in number of household lifts each week						72%	25%	-4%	34%	23%
1	land area in hectares	96662	76767	100413	51692	325534	96662	76767	100413	51692	325534
	households per hectare	0.33	0.73	0.50	1.09	0.60	0.33	0.73	0.50	1.09	0.60
3	recorded residual collection weekly mileage		5800					5800			
4	mileage per household		0.10					0.10			
	est likely mileage per one weekly collection to										
5	households (taking account of households per hectare)	4199	5800	6787	3947	20734	4199	5800	6787	3947	20734
6	Estimated weekly mileage for all current collections	4832	9140	13947	5823	33742	8294	11455	13405	7797	40951
Increase in weekly collection mileage due to the proposal											
Percentage increase in weekly collection mileage due to the proposal											
							72%	25%	-4%	34%	21%
Est Impact of Trip Reductions to bring sites and HRCs by residents											
	average RCV mpg					7					
7	average private car mpg					38					
	Therefore car mileage saving required to offset RCV mileage increase					39135					

8	mean trip length by residents to/from HRCs in miles	6	
9	assumed mean trip length residents using cars to from bring sites in miles	2	
			m
			il
			e
	to save	39135	s
			household
	number of households needing to cancel HRC trip per week	6522	s
	Percentage of households cancelling HRC trip per week	3.3%	of total households
	or		
			household
	number of households needing to cancel local bring site trip per week	19567	s
	or	10.0%	of total households
	for a combination of HRC and local bring site trip cancellations		
	mileage saved if 2% of households cancel a weekly trip to their nearest HRC	23388	
	mileage saved if 4% of households cancel a weekly trip to their nearest local bring site	15592	
	<u>total mileage saved</u>	<u>38980</u>	

notes

- 1 DNP planning service estimates for 2010. no growth assumed for purpose of this calculation.
- 2 Collection service estimates for garden waste customers 2010. (assume 95% in west)
- 3 N Wilts collection service automatic records for average week, residual collections only
- 4 N Wilts residual collection mileage per week, divided by number of households
- 5 N Wilts mileage per household multiplied by households in area, adjusted for difference in scale of land area
- 6 Est mileage per one collection (see note 5) multiplied by number of households collected from each week
- 7 <http://www.fuel-economy.co.uk/stats.shtml> use is similar.
- 8 Based on trip length data in HRC Visitor Survey Report 2004, Wiltshire Council. The great majority of residents travel 6 miles or less. Assume mean trip length = 3 miles or 6 miles return
- 9 Assumption based on distribution of local bring sites. Many residents will travel on foot, but car use is also common.

notes

- 1 DNP planning service estimates for 2010. No growth assumed for purpose of this calculation. assume 95% take up of optional service
- 2 (rounded)