

Docket No. R2005-1

USPS-LR-K-119

Standard Mail Unit Costs by Shape

Preface

This is a Category 4 library reference provided by witness Cutting (USPS-T-26) in light of POIR No. 2, question 2. This library reference documents the development of the test year unit costs by shape for Standard Mail Regular and Standard Mail ECR using inputs developed under the Postal Service cost methodology. This library reference relies upon test year mail processing costs by shape and test year volume ratios from witness Smith (USPS-T-13) as developed in USPS-LR-K-53; test year window service costs by shape from witness Cutting (USPS-T-26) as developed in USPS-LR-K-83; test year delivery costs by shape from witness Kelley (USPS-T-16) as developed in USPS-LR-K-67; test year vehicle service, transportation, and total costs from witness Waterbury (USPS-T-10) as developed in USPS-LR-K-7; test year piggyback factors from witness Smith (USPS-T-13) as developed in USPS-LR-K-52; base year volume and weight inputs from witness Loetscher (USPS-T-32) as developed in USPS-LR-K-87; and pounds-per-cubic foot density factors from witness Nash (USPS-T-17) as developed in USPS-LR-K-33. This library reference updates the Standard Mail flat/parcel cost differential portion of a previous study (USPS-LR-J-58), *First Class, Periodicals, and Standard Mail Weight Studies*, sponsored by witness Schenk (USPS-T-43) in Docket No. R2001-1.

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I. Introduction

This library reference provides the supporting documentation and analyses used to estimate test year unit costs by shape for Standard Mail Regular and Standard Mail ECR using inputs developed under the Postal Service cost methodology. This is a Category 4 library reference provided by witness Cutting (USPS-T-26) in light of POIR No. 2, question 2. This library reference updates the Standard Mail flat/parcel cost differential portion of a previous study (USPS-LR-J-58) sponsored by witness Schenk (USPS-T-43) in Docket No. R2001-1. The methodology used to develop the results in this library reference is the same as that used in USPS-LR-J-58/R2001-1 by witness Schenk.

This library reference relies on other witnesses' library references in this docket. The following sources are used:

- USPS-LR-K-53 (Smith) for test year mail processing costs by shape and test year volume ratios
- USPS-LR-K-83 (Cutting) for test year window service costs by shape
- USPS-LR-K-67 (Kelley) for test year delivery costs by shape
- USPS-LR-K-7 (Waterbury) for test year vehicle service, transportation, and total costs
- USPS-LR-K-52 (Smith) for test year piggyback factors
- USPS-LR-K-87 (Loetscher) for base year volume and weight inputs
- USPS-LR-K-33 (Nash) for pounds-per-cubic foot density factors

II. Organization

This library reference consists of eight sheets in the Excel workbook 'LR-K-119.xls.' The sheets 'Volumes' and 'Weight' contain base year piece and weight data by shape, respectively, adjusted to test year values using test year volume ratios. The 'Weight' sheet also contains estimates of cubic feet by shape based on density factors found on the 'Density' sheet. Test year costs for vehicle service and transportation are adjusted with test year piggyback factors on the 'TY06 CRA' sheet. Test year costs for delivery services by shape are adjusted with test year piggyback factors on the 'Carrier Costs' sheet. Costs by shape

and cost component are reported on the 'Costs' sheet. For components 3.1, 3.2, 6.1, 6.2, 7.3, 7.4, and 10, test year costs are distributed to shape based on results from other library references, with appropriate piggyback factors applied. For component 8 and for the highway/rail portion of component 14, test year costs are distributed to shape using cubic feet data. For the air/water portion of component 14 and for all other costs, test year costs are distributed to shape using weight data. The resulting unit costs by shape and cost component for each Standard Mail subclass are reported in the 'Unit Costs' sheet. These unit costs are reproduced in Table 1 below. The overall unit cost differential between flats and parcels for each Standard Mail subclass are provided in the 'Summary' sheet. These results are reproduced in Table 2 below.

Table 1: TY06 CRA Unit Costs (cents per piece)												
Piggyback Factors Applied												
Standard Mail - Regular Rate												
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	C/S 3.1	C/S 3.2	C/S 6.1	C/S 6.2	C/S 7.3	C/S 7.4	C/S 8	C/S 10	C/S 14	C/S 14		
Shape	Clk/Mh	Clk/Mh	City Carrier	City Carrier	City Carrier	City Carrier	Vehicle	Rural	Air &	Highway &	Other	Total
	Mail Proc	Window	In-Office	Support	Deliv Actv	Street Support	Service	Carriers	Water	Railroad		
Letters	4.34	0.09	1.05	0.35	1.52	0.18	0.07	0.77	0.02	0.32	0.14	8.85
Flats	14.69	0.12	4.30	1.25	1.66	0.20	0.28	1.88	0.11	1.39	0.71	26.60
Parcels	60.97	0.69	4.76	1.80	11.58	1.40	0.67	9.41	0.27	3.28	1.67	96.50
Total	7.17	0.11	1.81	0.57	1.64	0.20	0.12	1.10	0.04	0.59	0.28	13.61
Standard Mail - Enhanced Carrier Route												
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	C/S 3.1	C/S 3.2	C/S 6.1	C/S 6.2	C/S 7.3	C/S 7.4	C/S 8	C/S 10	C/S 14	C/S 14		
Shape	Clk/Mh	Clk/Mh	City Carrier	City Carrier	City Carrier	City Carrier	Vehicle	Rural	Air &	Highway &	Other	Total
	Mail Proc	Window	In-Office	Support	Deliv Actv	Street Support	Service	Carriers	Water	Railroad		
Letters	1.57	0.02	0.92	0.31	1.47	0.18	0.07	1.14	0.00	0.09	0.05	5.83
Flats	1.30	0.02	1.05	0.36	1.66	0.20	0.23	2.00	0.02	0.30	0.23	7.37
Parcels	893.44	0.01	2.02	0.93	8.78	1.06	0.29	9.52	0.02	0.38	0.29	916.75
Total	1.42	0.02	1.01	0.35	1.61	0.20	0.19	1.78	0.01	0.25	0.18	7.02
(1) Source: USPS-LR-K-53 (Smith) - shp06usps.xls, worksheet 'Summary (2)', rows 27 & 29												
(2)-(12) Source: calculation												

Standard Mail Regular		Standard Mail ECR	
	<u>Cost per Piece (cents)</u>		<u>Cost per Piece (cents)</u>
Parcels	96.50	Parcels	916.75
Flats	26.60	Flats	7.37
Difference	69.90	Difference	909.38