

Docket No. R2006-1

USPS-LR-L-135

Standard Mail Unit Costs by Shape

Preface

This is a Category 4 library reference provided by witness Talmo (USPS-T-27) in response to VP/USPS-T36-2, parts d and i. This library reference documents the development of 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-L-53; test year window service costs by shape from witness Talmo (USPS-T-27) as developed in USPS-LR-L-83; test year delivery costs by shape from witness Kelley (USPS-T-15) as developed in USPS-LR-L-67; test year vehicle service, transportation, and total costs from witness Waterbury (USPS-T-10) as developed in USPS-LR-L-7; test year piggyback factors from witness Smith (USPS-T-13) as developed in USPS-LR-L-52; base year volume and weight inputs from witness Loetscher (USPS-T-28) as developed in USPS-LR-L-87; and pounds-per-cubic foot density factors from witness Nash (Docket No. R2005-1, USPS-T-17) as developed in USPS-LR-K-33. This library reference updates the Standard Mail unit cost development from a previous study (USPS-LR-K-119), *Standard Mail Unit Costs by Shape*, sponsored by witness Cutting (USPS-T-26) in Docket No. R2005-1.

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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 Talmo (USPS-T-27) in response to VP/USPS-T36-2, parts d and i. This library reference updates the Standard Mail unit cost development from a previous study (USPS-LR-K-119), *Standard Mail Unit Costs by Shape*, sponsored by witness Cutting (USPS-T-26) in Docket No. R2005-1, and uses the same methodology.

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

- USPS-LR-L-53 (Smith) for test year mail processing costs by shape and test year volume ratios
- USPS-LR-L-83 (Talmo) for test year window service costs by shape
- USPS-LR-L-67 (Kelley) for test year delivery costs by shape
- USPS-LR-L-7 (Waterbury) for test year vehicle service, transportation, and total costs
- USPS-LR-L-52 (Smith) for test year piggyback factors
- USPS-LR-L-87 (Loetscher) for base year volume and weight inputs
- USPS-LR-K-33/R2005-1 (Nash) for pounds-per-cubic foot density factors

II. Organization and Methodology

This library reference consists of seven worksheets in the Excel workbook 'LR-L-135.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 'TY08 CRA' sheet. Test year costs for delivery services by shape are adjusted with test year piggyback factors on the '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.

**Table 1: TY08 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) | (13) |
|---------|--------------------------------|-----------------------------|--------------------------------------|------------------------------------|---------------------------------------|---|-----------------------------|-----------------------------|--------------------------|---------------------------------|-------|-------|--|
| Shape | C/S 3.1 Clk/Mh Mail Proc | C/S 3.2 Clk/Mh Window | C/S 6.1 City Carrier In-Office | C/S 6.2 City Carrier Support | C/S 7.3 City Carrier Deliv Actv | C/S 7.4 City Carrier Street Support | C/S 8 Vehicle Service | C/S 10 Rural Carriers | C/S 14 Air & Water | C/S 14 Highway & Railroad | Other | Total | Non-Mail Processing, Non-Carrier |
| Letters | 4.06 | 0.10 | 0.95 | 0.32 | 1.54 | 0.19 | 0.07 | 0.80 | 0.02 | 0.38 | 0.15 | 8.57 | 0.71 |
| Flats | 15.09 | 0.14 | 4.24 | 1.24 | 1.69 | 0.21 | 0.30 | 2.04 | 0.10 | 1.58 | 0.73 | 27.36 | 2.86 |
| Parcels | 59.60 | 0.59 | 4.38 | 1.76 | 13.66 | 1.66 | 0.69 | 11.22 | 0.23 | 3.65 | 1.69 | 99.12 | 6.85 |
| Total | 6.91 | 0.11 | 1.68 | 0.53 | 1.68 | 0.21 | 0.13 | 1.16 | 0.04 | 0.66 | 0.29 | 13.39 | 1.23 |

Standard Mail - Enhanced Carrier Route

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) |
|---------|--------------------------------|-----------------------------|--------------------------------------|------------------------------------|---------------------------------------|---|-----------------------------|-----------------------------|--------------------------|---------------------------------|-------|----------|--|
| Shape | C/S 3.1 Clk/Mh Mail Proc | C/S 3.2 Clk/Mh Window | C/S 6.1 City Carrier In-Office | C/S 6.2 City Carrier Support | C/S 7.3 City Carrier Deliv Actv | C/S 7.4 City Carrier Street Support | C/S 8 Vehicle Service | C/S 10 Rural Carriers | C/S 14 Air & Water | C/S 14 Highway & Railroad | Other | Total | Non-Mail Processing, Non-Carrier |
| Letters | 2.48 | 0.03 | 1.08 | 0.38 | 2.10 | 0.26 | 0.07 | 1.81 | 0.00 | 0.11 | 0.06 | 8.37 | 0.27 |
| Flats | 1.94 | 0.02 | 1.66 | 0.51 | 1.47 | 0.18 | 0.25 | 1.99 | 0.01 | 0.37 | 0.24 | 8.62 | 0.88 |
| Parcels | 2,450.04 | 0.01 | 0.14 | 0.94 | 22.80 | 2.77 | 0.45 | 11.35 | 0.02 | 0.66 | 0.43 | 2,489.61 | 1.58 |
| Total | 2.13 | 0.02 | 1.51 | 0.48 | 1.63 | 0.20 | 0.20 | 1.94 | 0.01 | 0.30 | 0.19 | 8.61 | 0.72 |

(1) USPS-LR-L-53 (Smith) - shp08usps.xls, worksheet 'Summary (2)', rows 27 & 29
(2)-(13) Calculation