

Carrier Route, and (3) MM High-Density and Saturation Flats and Parcels.² Catalogs are a moderate proportion of MM Flats, a large proportion of MM CR, and a smaller proportion of HD-SAT, though we have no data to quantify these proportions. The pieces in a specific mailing event usually fall into several different of the 42 categories.

Catalogs offer a wide range of goods and services, some of which are otherwise difficult to find. Catalogs are recognized in the mailbox and are valued by recipients. They are one of the Postal Service's largest markets. They generate follow-on mail in non-MM categories, including First-Class, Retail Ground, Priority, and Priority Express. Postage is an important cost to catalogers, and postal rates are a key determinant of the volume mailed.

As explained herein, it is ACMA's view that (a) the costs reported for the various flats categories raise serious questions of validity, so much so that they cannot be used to estimate the profitability of additions to volume,³ whether the addition is a catalog or

² In these comments, unless qualified: MM refers to USPS Marketing Mail; Carrier Route and CR refer to the Carrier Route product (mainly flats, with a very small number of letters and parcels); High-Density and HD refer to the composite of MM High-Density Flats and MM High-Density Plus Flats (which contain a *de minimis* (or zero) number of parcels); Saturation and SAT refer to the MM Saturation Flats category (which also contains a *de minimis* (or zero) number of parcels). Most catalogs are dropshipped; entry at a Destination Delivery Unit (DDU) is an option in some categories, but is used in limited degree by catalogs. In ECR (which includes CR, HD, and SAT), 2.87% of the pieces paying postage as flats are letter-shaped.

Most catalogs are automation compatible and most qualify for the IMb discount. A majority are co-mailed. Most are on pallets. Some are sent as Bound Printed Matter. A small number are sent as First-Class. A few small-format catalogs use MM Letters. "Brick and mortar" retailers sometimes send both saturation catalogs and targeted catalogs, and many catalog companies are multi-channel.

³ The costs reported as attributable are classified as being either marginal or inframarginal. Total attributable is the sum of the two. Small additions to volume, whether or not rate induced or NSA induced, would not incur inframarginal costs. The difficulties we identify apply mainly to the marginal costs (often called the volume-variable costs).

some other flat, (b) the incessant growth in the costs reported for the various flats categories, despite initiatives to lower them, is making it clearer and clearer that the Postal Service is failing in its obligation to provide mailers with an efficient delivery service, and (c) mailers have every right to ask for a tighter, more tailored, lower-cost processing stream into which we stand ready to prepare mail to flow efficiently into and through.

II. Revenue, Cost, and Volume Results for FY2018.

Though once the principal category, MM Flats now accounts for just 30.1% of the non-Saturation flats volume. A change in the rates of it would affect the volumes of MM Flats, CR, and High-Density. From the point of view of the market, these categories are interdependent. Accordingly, their profitability should be looked at together.⁴ The profitability of High-Density is usually reported with Saturation. Using the estimates in USPS Folder 27, Nonprofit can be pulled out, which allows a focus on Commercial.⁵

⁴ ACMA's comments herein do not depend on whether the Postal Service decides to designate these categories as a single "product." See USPS Compliance Report at 18, and Response to CHIR No. 1, Question 15.

⁵ In reply comments in Docket No. ACR2015, ACMA explained that the history of the Nonprofit rates, including guiding legislation, is consistent with all mailers together funding the Nonprofit rates (at 8-14). Further, it is difficult to square the behavioral characteristics of the current arrangement with the apparent intent of Congress. In its 2015 ACD, the Commission responded to this matter by saying that ACMA could "petition the Commission to consider such issues in another proceeding" (at 77). However, for purposes of assessing the rates being paid by Commercial mailers and by catalogers specifically, another proceeding is not needed. There is no bar to considering the cost coverages shown in these comments.

Furthermore, building on and incorporating the comments ACMA has made in the past, ACMA suggests that this Nonprofit matter be considered in the Commission's 10-year review. It is just plain difficult to view as reasonable that commercial mailers, including catalogers, think every day about increasing volume and the Postal Service reports no data that would allow an assessment of whether an increase would be profitable to it.

Cost coverages for the Commercial categories are shown in Table 1, which includes corresponding results for FY 2017 in brackets.

Table 1	
Commercial Cost Coverages FY 2018 [FY 2017]	
MM Flats + Carrier Route	93.3% [100.7%]
Percentage point decline in cost coverage	7.4 points
High-Density and Saturation Flats and Parcels	148.3% [161.2%]
Percentage point decline in cost coverage	12.9 points

That the cost coverages declined as much as 7.4 and 12.9 points, despite the rate increases early in the year, makes it clear that the costs increased significantly. Aspects of this matter are dealt with in these comments. Table 2 shows the same results for a wider range of categories.

Table 2			
Flats-Category Cost Coverages FY 2018 [FY 2017]			
	Commercial	Nonprofit	Product Total
MM Flats	77.6% [81.7%]	45.3% [50.3%]	68.6% [73.9%]
Carrier Route	110.5% [127.5%]	81.1% [85.8%]	108.5% [124.1%]
HD-SAT	148.3% [161.2%]	81.5% [85.3%]	144.9% [157.1%]

FY 2018 volumes are shown in Table 3, along with percentage changes for FYs 2018 and 2017.

Table 3			
FY 2018 Volumes (000 omitted) & Percents Δ from FYs 2017 & 2016			
	Commercial	Nonprofit	Total
MM Flats	3,011,878	1,066,889	4,078,768
From 2017 to 2018	-20.75%	-6.72%	-17.5%
From 2016 to 2017	-25.4%	-5.68%	-21.6%
Carrier Route	6,516,587	517,526	7,034,113
From 2017 to 2018	-0.71%	-9.3%	-1.39%
From 2016 to 2017	+6.1%	+24.8%	+7.39%
High-Density	2,306,131	130,696	2,436,827
From 2017 to 2018	+14.1%	-13.5%	+12.1%
From 2016 to 2017	+14.3%	+18.4%	+14.6%
Total	11,834,596	1,715,111	13,549,707
From 2017 to 2018	-4.4%	-8.0%	-4.9%
From 2016 to 2017	-5.1%	+3.8%	-4.0%

In MM Flats, Commercial volume declined *much more* than Nonprofit volume (-20.75% v. -6.72%). This happened last year as well (Commercial down 25.4% and Nonprofit down 5.68%), making MM Flats much more a category for Nonprofit. The suggestion is that commercial mailers, in greater degree than nonprofit mailers, are either reducing their volume or finding ways to migrate to CR and HD. In the case of migration they are doing privately what was done in the past by the Postal Service. That Nonprofit grew in importance accounts for a portion of the decline in the cost coverage. In Carrier Route, Commercial declined *less* in 2018 and grew *less* in 2017. The relative growth (smaller decline) in 2018 *contributed* to an increase in the coverage of CR. Despite this contribution, the net coverage of CR declined considerably, meaning that the inherent decline was that much greater.

III. The ACMA Cost Index Can Be Used to Quantify the Role of Cost Increases in Explaining the Decreases in Reported Cost Coverage.

Table 2 shows that the cost coverages of MM Flats and CR declined 5.3 percentage points and 15.6 percentage points, respectively.⁶ Each of these is a large decline, particularly given that rate increases occurred early in the year. One way to look into the causes of this is to prepare weighted indexes of the unit costs of the attendant operations.⁷ Weights hold the mix constant and thus cut through some of the complexity caused by volume shifts, some of which were due to changes in the product category that housed the FSS'ed volumes that qualified inherently for CR.

The ideal weighted unit cost index takes this form

$$\frac{\sum_{i=1}^N (V_{i,1} \times UC_{i,2})}{\sum_{i=1}^N (V_{i,1} \times UC_{i,1})}$$

where $UC_{i,j}$ is the unit cost of elemental processing activity i in period j . The summation is over N processing steps or activities. The weights, $V_{i,1}$, are the corresponding period-1 volumes and are the same in the numerator and denominator. A quotient of 1.05

⁶ In its Compliance Report (at 33-35), the Postal Service explains that during the first quarter of 2017, the revenues and costs of CR mail destined to FSS zones were reported as parts of MM Flats, though paying CR rates. Thus, contributing to a decline in CR coverage in 2018 was that a full proportion (the proportion going to FSS zones) of CR mail received high-cost FSS processing. Its unit revenue was approximately unchanged by having back the first-quarter volume, and its (average) unit cost increased. Similarly, it explains, a lesser proportion of MM Flats received high-cost FSS processing. Its average unit cost would decline (due to the lesser proportion) and its unit revenue would increase because the CR portion in Quarter 1 was permitted to pay CR rates. This would contribute to an increase in the coverage of MM Flats. Only mail processing costs were affected by this shift.

⁷ In comments in Docket No. RM2018-1 (October 1, 2018), ACMA suggested that the Postal Service develop weighted unit cost indexes for its products. An index that it develops would not need to be identical to the ACMA index discussed herein, but we believe the results would be essentially the same.

would mean that the average unit cost for an unchanged product mix was 5% higher in period 2 than in period 1. If the index were pegged at 100 in period 1, one would say that the level of unit cost in period 2 is 105. Since the price index used in rate proceedings is identical except that *UC* is replaced by *P* (*P*=price), this index and its properties are familiar.

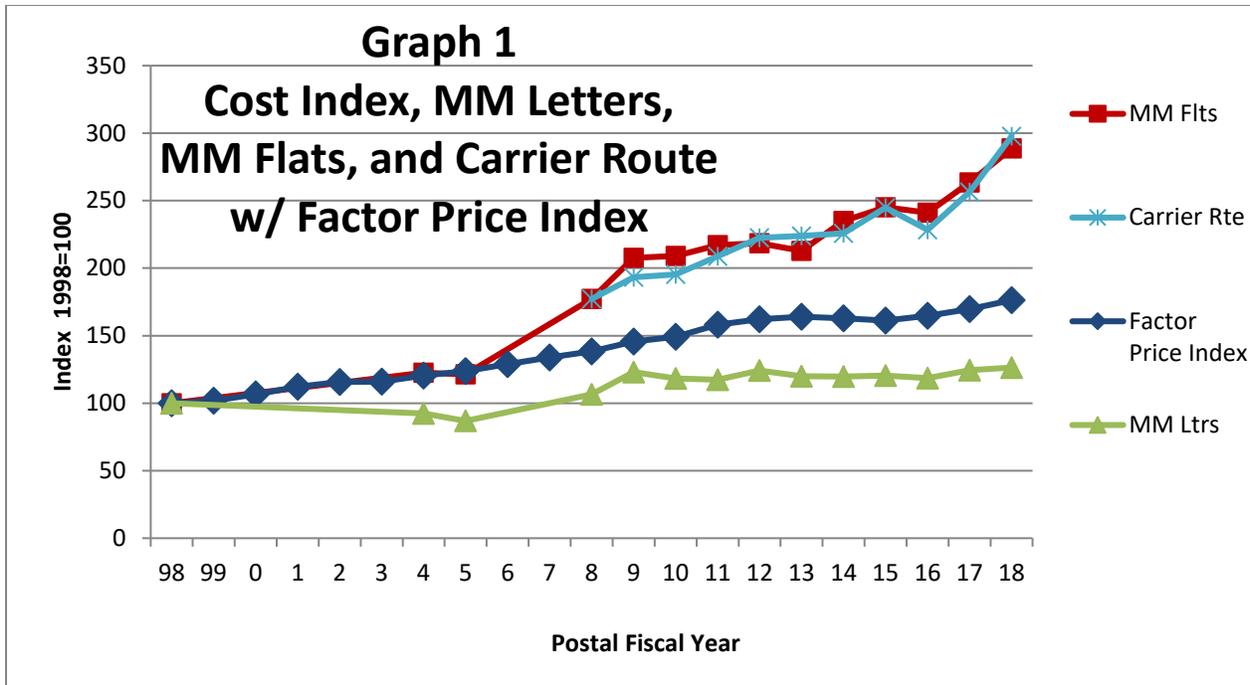
Developing a unit cost index is ordinarily a considerable undertaking. However, in its Initial Comments in Docket No. ACR2011, ACMA showed that such an index can be closely approximated with an index developed from the price index and the cost coverages.⁸ We have referred to this as the ACMA unit cost index.

For the period since FY 1998, Graph 1 shows the ACMA unit cost index for MM Flats and Carrier Route, along with the factor price index.⁹ To allow a comparison, the index for MM Letters is also shown.

⁸ Although care is needed to get the formulation right, it is not difficult to see that cost-increase information is contained in the rate index and the cost coverages. The cost coverage is the revenue over the cost. If the rates increase, the revenue increases, which increases the coverage. If the cost increases, the coverage decreases. If the rate increase is accounted for, the reason left for a coverage decline is a cost increase. Mix changes are recognized in the numerator (because rates are weighted by volume) and the denominator (because elemental costs are weighted by volume).

Implicit in the ACMA cost index is a price-weighted quantity index. (This is because an index of unweighted total costs divided by a unit cost index is, by definition, a quantity index.) In its Reply Comments in Docket No. ACR2011, the Public Representative reasoned that a *cost*-weighted quantity index might relate more closely to workload. In its Comments in Docket No. R2013-1 (Nov. 1, 2012), ACMA developed a *cost*-weighted quantity index and showed that its behavior over time is substantially the same as the implicit *price*-weighted quantity index.

⁹ *Factors of production* are inputs to production processes. Prices paid for factors are termed “factor prices.” Obviously, factor prices are important determinants of costs. In the Postal Service, the main factors are labor, transportation, and equipment. If the weighted-average of the prices paid for the factors used increases 10 %, for example, and nothing else changes, one would expect the cost to increase 10%. If the cost increases less than 10%, it would normally be because of technical innovation and productivity increases. An all-inclusive index of factor prices for the Postal Service is one of the outputs of the Total Factor Productivity (TFP) analysis.



The Carrier Route index is pegged at the 2007 level of the MM Flats index, because earlier data for CR are not available. Almost none of the changes this year are due to changes in costing method.¹⁰ For 2015, the new city carrier costing analysis explained part of the increases for MMF and CR. The increases this year and last year are each larger than the 2015 increases. The curve for MM Letters, on the other hand, is within bounds and approximately what one would expect. It is below factor prices and thus shows an increase in the efficiency of letter operations.

It is interesting to note that the curves for both MMF and CR increase and decrease together over the last several years. This suggests that the index is correcting properly for mix changes. Specifically, the curves do not reflect FSS'ed CR volume shifting in and out of MM Flats. Graph 3 below, which shows unweighted costs, shows some effects of the shifting.

¹⁰ See USPS Compliance Report at 32, "no major costing method[] changes."

The picture painted by this graph is a picture of the martyr of flats. Mailers have made improvements in mail preparation. The Postal Service points to a long list of initiatives purported to have reduced costs. Yet since FY 1998 the unit cost of MM Flats, mix held constant, is up 188.6% (and CR is up similarly). Factor prices are up only 76.1%. Rates are up 93.3%, more than enough to cover the factor price increases. As a result, the cost coverage has declined from 102.5% to 68.6%. What has been happening? A relatively small part of the cost increase was due to changes in costing procedures. A common refrain is to point to lost scale economies, but there are problems with this explanation: (a) the scale of operations has not changed, (b) scale losses, if they occurred, would not be this large, and (c) scale losses in cost segments with high variabilities cannot occur, by definition—if volume losses have caused cost increases, then the variability analysis is wrong and the costs are too high, no explanation allows otherwise. The sections that follow examine associated matters.

IV. An Examination of City vs. Rural Delivery Costs Reveals that the Cost Increases Are Larger than Apparent in Aggregate Documents.

As part of its development of delivery costs for 81 key categories, now strangely excluding CR, the Postal Service provides an Excel workbook called UDCmodel18 (see Folder 19). Similar workbooks existed in earlier years. In the overall, these workbooks develop city-plus-rural delivery costs for each category, per the total volume of pieces in the category, which means per representative (or average) piece. In FY 2018, for example, in MMF, 64% of a representative piece incurs city costs and 36% of it incurs rural costs. However, these workbooks also provide the *city-delivered* volumes and the *rural-delivered* volumes. Therefore, it is relatively easy to express city costs per city-

delivered piece and rural costs per rural-delivered piece. We did this for MM Flats, with piggyback factors applied. Table 4 shows the results for FYs 2016 through 2018, with percentage changes.

Table 4: Unit MM Flats Costs of City and Rural Carriers per City-Delivered and per Rural-Delivered Piece, for FYs 2016 through 2017, with Year-on-Year Changes					
Category	2018 cost/pc	Δ from 2017	2017 cost/pc	Δ from 2016	2016 cost/pc
Office direct casing cost	13.31¢	+31.97%	10.09¢	+18.03%	8.55¢
Per cased piece	16.44¢	+16.33%	14.13¢	+ 1.82%	13.88¢
Change f/ prior year		+ 2.31¢		+ 0.25¢	
Office direct non-casing cost	3.92¢	+48.04%	2.64¢	+36.79%	1.93¢
Office overhead cost	4.59¢	+42.54%	3.22¢	+11.58%	2.89¢
Office Total (w/ O. on St.)	22.21¢	+36.05%	16.33¢	+18.16%	3.82¢
Street direct delivery cost	6.78¢	- 7.62%	7.34¢	- 12.86%	8.42¢
Street delivery support cost	0.68¢	- 7.69%	0.74¢	- 12.99%	0.85¢
Office cost burdened on street	0.39¢	+ 2.69%	0.38¢	- 15.01%	0.45¢
Street Total (w/o O. on St.)	7.46¢	- 7.57%	8.07¢	- 12.92%	9.27¢
City Carrier Total	29.67¢	+21.62%	24.40¢	+ 5.68%	23.09¢
Rural Carrier Total	10.53¢	+17.39%	8.97¢	+ 7.24%	8.36¢
Total	22.85¢	+17.97%	19.37¢	+ 4.00%	18.62¢
Total Apparent in CRA	21.59¢	+12.22%	19.24¢	+11.14%	17.31¢

For city carriers the office costs are lower for FSS'ed flats than for cased flats,

and the street costs are higher.¹¹ In FY 2018 MM Flats did not pick up any costs for CR volume processed on the FSS. In FY 2017, however, it picked up such costs through January 21. We will refer to this as 4 months, even though (a) the pickup occurred only for mail to routes in FSS zones and (b) the volume per month varies. Because the pickup occurred for a fraction of a year on a fraction of the routes, the effect is not as large as might at first be thought. Also, we will refer to CR volume that moves into or out of MM Flats as shifting volume. The Postal Service has referred to it as migrating volume (USPS ACR at 34).

This shifted CR volume (a) increased the volume of MMF by a certain proportion, (b) increased the MMF office costs less than that proportion (because the shifted volume is not cased, though a portion of it is collated¹²), and (c) increased the MMF street costs more than that proportion (as a greater proportion of the shifted pieces incurs the higher FSS street costs than the proportion of the base MMF pieces that incurs these higher costs).

If the office advantage was greater than the street disadvantage, the balance is that the presence of this shifted volume lowered the 2017 unit MMF city carrier costs

¹¹ See USPS Reply Comments, Docket No ACR2016, at 36, explaining an additional 2.8 seconds of street time for each cased flat and an additional 5.2 seconds (85.7% more) for each FSS'ed flat. Note, however, that the portion of FSS'ed flats that is collated receives the same treatment (and costs) on the street as cased flats, because, in effect, collated flats have been cased.

¹² We presume the collation process functions as follows. Mail-to-be-cased for routes is cased. Any FSS'ed pieces arrive and are given to the carriers. If a route is a walking route, the carrier will collate the FSS'ed pieces. This means they will be cased along with the pieces already cased. The FSS'ed pieces to be collated would cover nearly all of the stops on the route and they are already walk sequenced. Also, if several pieces go to the same stop, they are together and can be handled together. Therefore, the collation process would be rapid. After collation, all pieces in the case would be pulled down. Note that since the route is an FSS route, the number of pieces in the case before collation might be relatively small.

somewhat. Relative to 2017, then, the unit MMF costs in 2018 would appear higher because 2018 has no shifted pieces. As between office and street, the shifted volume would cause the 2017 office costs to be lowered significantly and the 2017 street costs to be somewhat higher, thus explaining at least part of the 36.05% *increase* for the 2018 Office Total and the 7.57% *decrease* for the 2018 Street Total in Table 4.

In FY 2016, MM Flats picked up about 8 months more of the costs for shifted CR flats than in 2017, i.e., it picked them up for the whole year. Similarly, then, this would explain at least part of the 18.16% *increase* in the 2017 Office Total and the 12.92% *decrease* in the 2017 Street Total.¹³ However, since 2017 had about 4 months more of shifted volume than 2018 (which has zero months), and 2016 had about 8 months more of shifted volume than 2017, the shifting does not explain why the 36.05% is not lower than the 18.16%. That is, if 8 months of shifted volume propelled the 2017 office increase to 18.16%, how did 4 months of shifted volume propel the 2018 office increase all the way up to 36.05%? It appears that the office costs in 2018 are inexplicably high, certainly not explained by the shifted CR volume in 2017.

In FY 2018, a year of no shifted CR volume, approximately 20% of the MMF pieces were FSS'ed, and about half of these needed to be collated.¹⁴ The Postal Service incurs, then, FSS costs for 20% (of the volume), collation costs for 10%, and casing costs for 80%. The office direct casing cost per city-delivered MMF piece is

¹³ For a discussion of CR volume to FSS zones shifting to MMF, see USPS ACR in the instant docket at 33-35.

¹⁴ We take Foot routes and Park & Loop routes to be walking routes, for which collation is required. We do not know the current proportion of walking routes. In FY 2015, 57.0% of routes were walking routes, down slightly from 2014. See Response to CHIR No. 13, Question 19, Docket No. ACR2015 (February 26, 2016).

shown in Table 4 to be 13.31¢. If this cost is expressed per *cased* MM piece, it rises to 16.44¢. This is substantially high. With adequate volume, a representative carrier receiving 16.44¢ for each piece cased would soon be a rich carrier, and he would not complain at having to go through a rapid collation process for about 10% of his pieces, which are, importantly, highly dense relative to the route and already walk sequenced. Inquiry into why it costs this much to case a flat, a cost that is developed to be marginal in nature, should be a priority.

FY 2016 has about 8 months more shifted volume than 2017, and 2017 has about 4 months more than 2018. This would make 2016's cost per cased piece 8 months lower than 2017 and 2017's 4 months lower than 2018. So the 2017 increase should be larger than the 2018 increase, and it is not; it is smaller instead, 2017 at 1.82% and 2018 at 16.33%. Why is the 2018 increase, at 2.31¢/piece, so much larger than the 2017 increase, at 0.25¢/piece, when it should be smaller? As concluded above, the office cost of MMF in 2018 is exceedingly high.

Now consider the direct street delivery cost. This cost declined 12.86% in 2017 and 7.62% in 2018. These may be due to 2016 having 8 months of high street costs for shifted CR, 2017 having 4 months, and 2018 having zero months. If so, these cost declines do not reflect a tightening of street operations, rather they reflect in considerable degree the exclusion in the more recent years of the higher street costs of the CR FSS'ed pieces.

Going further, compare the 2018 City Total cost of 29.67¢, a cost that is free from effects of shifting CR volume, to the Rural Total cost of 10.53¢. City costs are well-known to be higher than rural costs, the latter being based on an "evaluation system."

Expressed on an hourly wage-rate basis, the Postal Service assesses them at 12.5% higher.¹⁵ But 29.67¢ is 181.8% higher than 10.53¢. The weighted total of city plus rural is 22.85¢, up 17.97% from 2017. At 21.59¢, the CRA figure is somewhat lower due to the discrepancy that the total volume is higher than the sum of the city and the rural volume.

Table 4 also shows some smaller components, like the increase of 48.04% for direct non-casing cost in the office, and 42.54% for office overhead. The levels and behavior of these costs raise questions as well.

One more effect, less obvious than those above, deserves attention: If the increase of the City Carriers Total is 21.62% and the increase of the Rural Carrier Total is 17.39%, how can the average increase (apparent in the CRA) be less than either, at 12.22%? We offer a two-part answer. (1) The discrepancy noted above, that the total MMF volume is greater than the sum of the city-delivered volume and the rural-delivered volume, dilutes the cost increase apparent in simple CRA comparisons. This discrepancy allowed the CRA total to increase 12.22% instead of 17.97%. No discrepancy appeared in 2017.¹⁶ (2) The city volume declined more rapidly than the rural volume, city down 25.23% and rural down 14.37%. This means that a greater proportion of MM Flats volume is now being delivered by rural carriers, which makes the average cost lower. This same effect occurred in 2017, with city down 19.23% and rural

¹⁵ See Postal Service response to Question 7 of CHIR No. 6, February 8, 2019.

¹⁶ We call this volume difference (that the total volume [often called the RPW volume] is higher than the sum of city and rural delivered volumes) a “discrepancy” because we do not understand it. Since the difference was virtually zero in 2017, it may not be ordinary.

down 10.20%. It is revealed, then, that very large increases in the costs exist but are hidden by a shift to rural.

The shift to rural can be combined with the shift to Nonprofit, the latter shown in Table 3 (on page 5). With the two together, it appears that MM Flats is becoming a Nonprofit service to rural Americans. The nonprofit content could be soliciting funds, providing information, or offering services—we do not know. As a matter of policy, understanding this should dampen any concern that the category is under water.

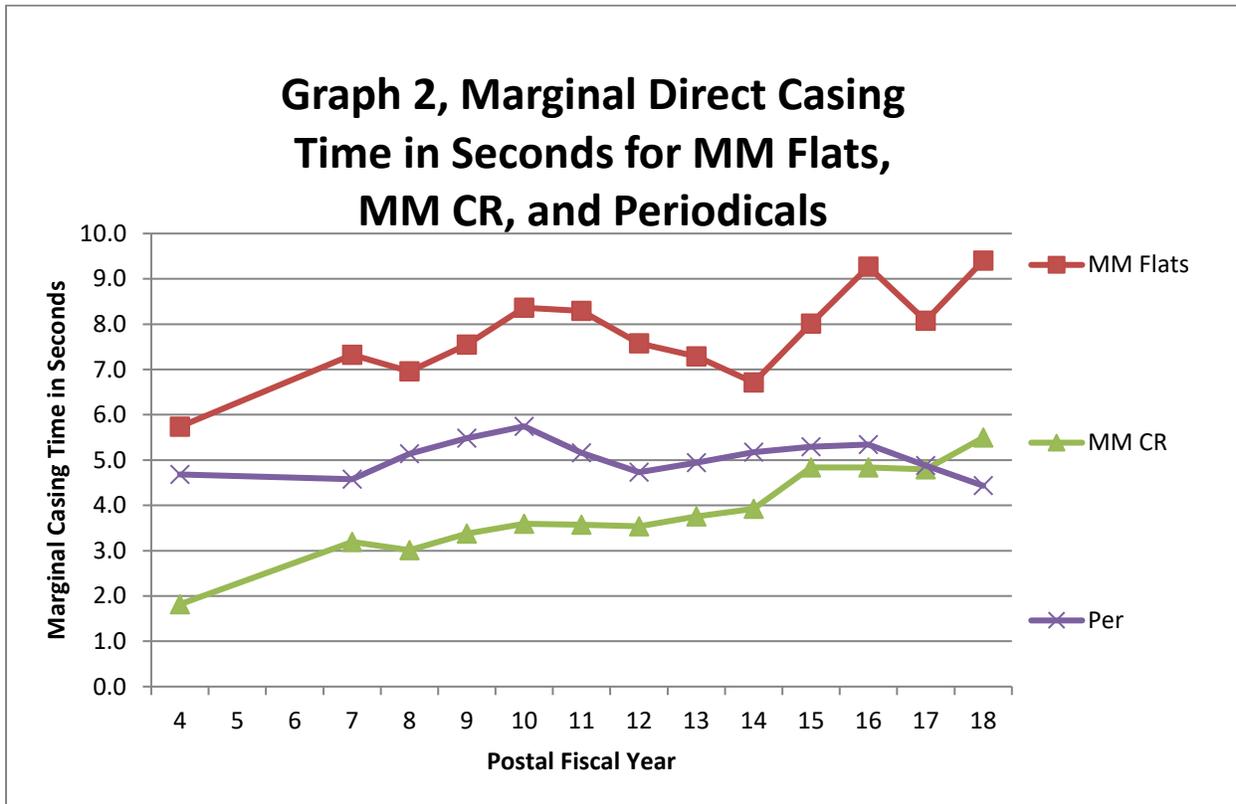
V. Further Comparisons, City Casing, City Street, and Five-Digit Mail Processing Cost.

When an estimate is developed, one looks for ways to determine how good it is. One way to test results is to compare behaviors over time with what would be expected. Another is to compare results with expert opinion. Such tests are often subjective. Sometimes a separate analysis can be done to focus narrowly on a comparison, such as doing an MTM study of relative carrier motions, setting up controlled experiments, or doing stop-watch timings. An idiomatic expression for some of these tests is whether the results pass the sniff test. Some of the tests in this section could be called sniff tests.

City Carrier Casing Time. Graph 2 shows estimates of the direct casing time in seconds, per cased piece, for MM Flats, MM CR, and Periodicals, without direct non-casing time or the application of piggyback factors. For walking routes, these times include, since 2011, time to collate sequenced FSS pieces with already cased pieces.¹⁷

¹⁷ In 2018, 18.99% of MMF volume was FSS'ed. Source: Folder 19, UDCInputs18.xlsx. Of this, only the mail for foot and park & loop routes would be collated.

This adds to the numerator but not the denominator. They also include a small amount for container positioning, handling UAA, and pulldown.¹⁸



At about 5 seconds, consistent with a casing speed of 12 pieces per minute, the Periodicals casing time is reasonably well behaved.¹⁹ No effect of FSS collation is

¹⁸ See USPS Reply Comments, Docket No. ACR2016, at 37. In the MM class, the time to handle UAA mail should not be large. Some of it goes to an address even if the person has moved. We believe address correction service and forwarding are seldom requested. Pulldown time covers all mail categories in the case and should not be large on a unit basis.

¹⁹ The Periodicals times in the graph are for the Periodicals *class*, which includes Regular, Nonprofit, Classroom, and In-County. The first three of these together is often referred to as Outside County, although some of the pieces in it *are* delivered within the county of publication (because they do not qualify for In-County rates).

apparent.²⁰ The declines in 2017 and 2018 could be due to increases in the proportion that is carrier-route and finer presort, which went from 56.2% in 2016 to 69.8% in 2018.²¹ A requirement for that presort level is line-of-travel (LOT), which is cased more rapidly than mail of the lesser presort levels.

MM Carrier Route, however, is all LOT, and we suspect it has more pieces per route than Periodicals. Its casing time is below Periodicals in most years, 61.2% below it in 2004, but 24% above it in 2018. Further, the casing time of CR has increased from 1.8 seconds in 2004 to 5.5 seconds in 2018, neither of which years was affected by CR-FSS shifting to MMF.²² This is an increase of 3.7 seconds per piece, 206% in proportionate terms. Multiplied by the cased CR volume, 3.7 seconds is 1,778 work years, with no allowance for sick leave or annual leave. This is a substantially large increase in both absolute and relative terms. It warrants serious questions. Logic would argue that CR should be *below* Periodicals.²³

²⁰ In FY 2018, the proportions of volume FSS'ed for MM Flats, Carrier Route, and Periodicals were 18.99%, 20.03%, and 17.20%, respectively. The proportions in 2017, in the same order, were 28.60%, 14.02%, and 18.37%. Only the pieces for walking routes would be collated. See file UDCInputs18.xlsx in Folder 19.

²¹ Calculable directly from the billing determinants, USPS Folder 4, Dockets No. ACR2016 and ACR2018. An increase this large over just two years is noteworthy. Against a passthrough of 70% for carrier-route presort, it indicates that the private sector is taking over all postal work prior to carrier casing. Passthrough from Folder 3.

²² If CR mail for FSS zones leaves CR and goes to MMF, the casing time per cased piece for CR should decrease because of savings in collation time. In 2015, about 4 months of volume left, but the cost increased. All of the volume for FSS zones was gone in 2016, but the costs did not change. Three quarters of volume returned in 2017, but costs did not change. Therefore, the effect of shifting volume is not apparent in CR.

²³ A separate analysis of the casing speed of CR and Periodicals might be helpful here. If CR tends to be cased at 1.25 times the speed of Periodicals, a constraint could be built into the costing system. Such studies have been done before, like the one done by witness Shipe in Docket No. R90-1 for Saturation rates. See *also* USPS-LR-I-307, Docket No. R2000-1.

Similarly, the casing time for MM Flats has increased from 5.7 seconds in 2004 to 9.4 seconds in 2018, two years in which it did not receive CR mail for FSS processing. This is another 3.7 seconds and another block of workyears, this time 993. In proportionate terms, 3.7 seconds is an increase of 64%, indicating that casing speed went from 10.5 pieces per minute in 2004 down to 6.4 pieces per minute in 2018. This is a period during which the proportion of machinable pieces in MM Flats increased substantially, which would probably contribute to an *increase* in casing speed.

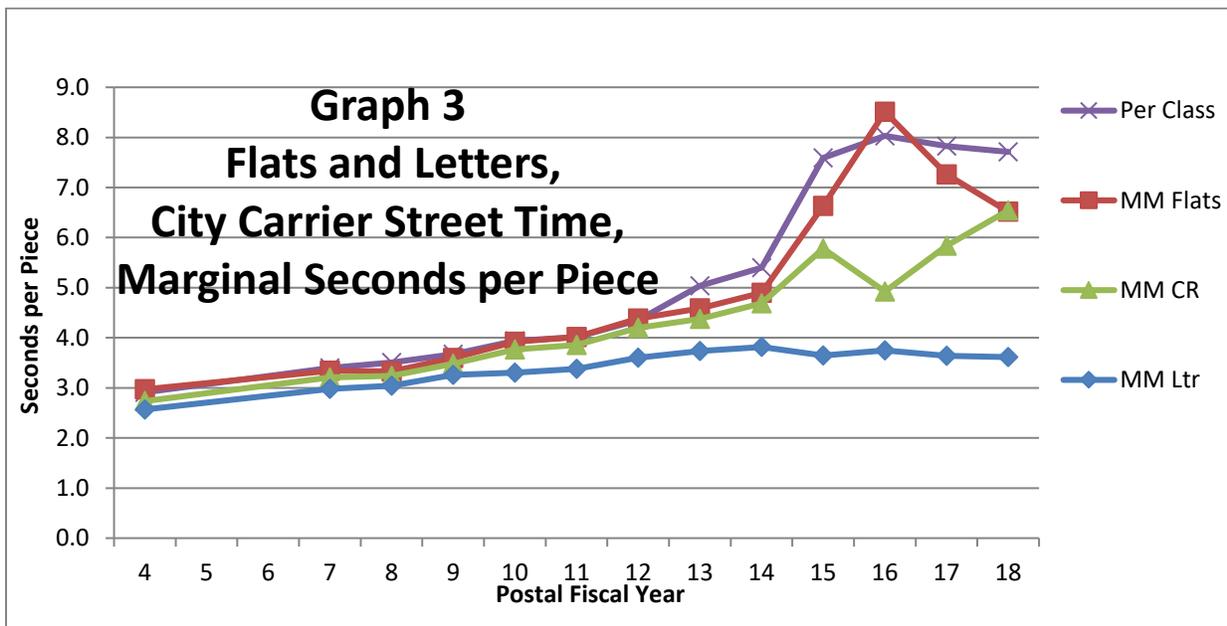
These results raise questions that should be answered before they are taken as measures of cost changes that would be associated with volume changes, or of costs that are fairly attributable. First, what is the cause of the trend-like increases for all categories except Periodicals? Would this occur in a tightly controlled productive operation?²⁴ Second, why is the casing time for MM Flats so much higher than the casing time for CR, which itself has increased to inordinate levels? It is true that MM Flats would be cased more slowly, but it is also true that a significant portion of MM Flats is printed in house-number sequence, which is preserved in degrees when it is sorted to carrier route.

A portion of these increases may be due to the need to collate FSS'ed mail with cased mail for walking routes. But in 2018, only 20.0% of CR and 19.0% of MMF was FSS'ed, and only about half of the routes are walking routes. Further, since the FSS'ed volume is sequenced, the collation process should proceed rapidly. If collation costs

²⁴ It is well known that the industrial engineers at UPS have more stop watches than pencils. More recently, we have seen videos of robots and super-efficient people at Amazon's warehouses. Attention of this kind is critical to achieving a low-cost operation.

due to the FSS are causing these costs to increase, the Postal Service should quantify the effect.

City Carrier Direct Street Time. A review similar to the one for direct casing time can be done for direct street time. For city delivery carriers, Graph 3 shows estimates of the marginal direct street time in seconds for MM Flats and MM CR. For reference, curves for Periodicals and MM Letters are also shown. None of the curves include street support time, in-office time burdened on street, or the application of piggyback factors.



Over the period since FY 2004, the marginal street time for MM Letters increased from 2.6 seconds to 3.6 seconds, an increase of 40.6%. The small decline in 2015 appears due to the new street cost analysis. With new costing throughout, the increase would be 40.6+%. The volume of MM Letters declined 3.3% over the period; the USPS-wide volume of letters and cards declined about 27%. Some observers would write-off the increase in time to a loss in scale economies for letters, although the scale of

delivery operations has not changed.²⁵ But even if some scale economies were lost, a volume loss of 27% would not be expected to cause a cost increase of 40.6+%. A cost increase of 5% maybe, but not 40.6+%.

The street times of CR and MM Flats have increased, in order, 139.2% and 119.4%, including the effects of the 2015 costing change. These increases are 2.9 to 3.4 times as large as the increase for MM Letters. The flats handled by city carriers would include First-Class, MM Flats, CR, and HD. We have not attempted to calculate the decline of this volume, but it is in all likelihood larger than the decline of 27% of letters. Still, the increase in street time is exceedingly large and warrants specific inquiry.

When we presented these figures in the 2016 Compliance Review, the Postal Service explained on reply that street costs are incurred on the basis of the container of the mail: a flat in a container of cased mail taking an additional 2.8 seconds and a flat in a container of FSS'ed mail taking an additional 5.2 seconds.²⁶ This extra street cost for FSS'ed mail explains some of the volatility in this graph, but not its general level. For example, in 2015 the CR-FSS volume was counted as part of MM Flats for just over 4 months, but in 2016 it was so counted for the entire year. In 2016, then, the graph accordingly shows an increase for MM Flats and a decline for Carrier Route.

²⁵ In its Reply Comments in Docket No. ACR2016, the Postal Service refers to “the known economies of density in delivery” causing an “increase in marginal time” (at 35). Generally, however, economies of density refer to dividing a fixed cost by a larger volume. Since the street times are designed to be marginal, and therefore would not include fixed costs, they should not increase due to a loss of economies of density.

²⁶ USPS Reply Comments, Docket No. ACR2016, at 36.

The levels of these street times, and the increases in them, are too high. If all of the elevation is caused by the FSS, the Postal Service should quantify that effect and explain why it is appropriate. Mailers have every right to expect a tight, smooth street system that delivers their mail at a low cost.

The Cost of Processing Automation 5d Presorted Flats. In our initial comments in Docket No. ACR2016, we included several observations about the mail processing cost of 5d automation pieces, which account for 69.3% of Commercial automation. In reply comments, the Postal Service corrected three early cost figures. With its correction, the mail processing cost of these flats, after being deflated by a clerk wage index, is about 7% below the 1998 level, despite significant volume loss.²⁷ During this period, improvements were made in equipment and mail preparation, including improved barcodes. Nothing apparent in this result suggests a meaningful loss in scale economies.

But the real problem with the mail processing cost of 5d auto flats is not its behavior over time; rather, it is its current level of 25.88¢. This is 6.52 times the corresponding cost for 5d auto *letters*. Viewed another way, it is 20.59¢ higher than the mail processing cost of CR.²⁸ Under good conditions, a CR bundle is sorted to a container that is taken to a delivery unit, where a clerk channels it to a carrier. A 5d

²⁷ It is not clear what volume is relevant to 5d costs. Mail at lesser presort levels, at later stages in its processing, goes through some of the same processing as 5d. Also, it would seem that Periodicals and First-Class would often be processed along with it too.

²⁸ Mail processing cost for 5d auto (25.88¢/piece) from MM Flats sheet in Folder 11, and mail processing cost for CR (5.29¢/piece) from Unit Cost Detail sheet in Folder 30. The latter folder shows a cost for CR on pallets of 3.14¢/piece, which is not comparable to the 5d auto cost. Some of the CR on pallets may be entered at the DDU. The 5d auto cost for MM Letters is found in Folder 10.

bundle is sorted to the appropriate AFSM100, where it receives one sort and is dumped into a tub for one carrier. Then the tub is taken to a delivery unit, where a clerk channels it to a carrier. Since there should be more pieces in a tub than in a bundle, the per-piece cost of channeling the tub should be lower. So the 20.59¢, which is a substantial sum in the world of postal processing, covers one sort on an AFSM100.

The spreadsheet model of the handling of 5d auto flats shows an AFSM100 cost of 1.847¢ per piece. To this is added indirect costs of 1.350¢. After a downward adjustment of 0.034¢ to remove the effects of premium pay, the cost becomes 3.169¢. When costs for a bundle-sort are factored in, plus some costs for pieces that take a more circuitous route, a dizzying total of 11.650¢ is obtained. But that is not all. This cost is then multiplied by a CRA adjustment factor of 1.358, to align modeled costs with myriad other costs associated with handling flats. The spreadsheet estimating the 11.650¢, which models other presort levels as well, has 39 tabs, including detailed flow paths and attention to 68 MODS categories. It uses actual productivities for 46 operations. It is surprising that this already-high result needs to be multiplied by 1.358. Then a cost of 10.064¢ (cf. only 1.186¢ for letters) is added to cover costs that vary with piece volume but not with presort level. The total is 25.880¢. This is this figure that is 20.59¢ higher than the corresponding figure for CR.

It is difficult to argue that the costs underlying these figures are not incurred somewhere for something. But we see it as highly questionable that they are marginal to 5d auto flats. Of the 69.3% of Commercial auto volume that is 5d, about 69.6% is dropshipped to the DSCF. A lion's share of the mail, then, is already entered at a destination facility. What mailers need is a system that allows them to prepare mail for

the machine and bring it to the DSCF, and then incur the direct plus indirect processing cost of 3.169¢. Once in a tub, the pieces could go to carriers in much the same way as CR bundles. This would provide a low-cost mailstream, much like we believe a stand-alone private operation would provide. Mailers would adapt to it and the 69.3% figure and the 69.6% figure would rise. The problem is that the current mailstream is far from what should be the design standard, and the costs incurred are substantially above what they should be. They are undoubtedly above the costs of a workably competitive stand-alone operation. Mailers need a much better system than they have.

**VI. The State of MM Flats
Is the Result of a Curious Train of Developments.
Its Cost Coverage Should Not Be Assessed in Isolation.**

When a letter or document, or booklet or catalog, is more than four pages or so long, and it is mailed, it is usually mailed as a flat. The whole of the printing industry has worked to produce flats, to meet a range of mailing needs. The Postal Service needs to preserve and maintain a nationwide flats processing capability. To this end, it has designed systems and developed automation, and mailers have worked with it to prepare suitable pieces.

In a classification change in Docket No. R90-1, the rates for non-letters were set above the rates for letters. Both letters and non-letters were housed in one of two principal categories: Bulk Rate Regular and Bulk Rate Nonprofit. The breakdown *within* was basic, 3/5-digit, carrier route, and saturation.²⁹ Now, Commercial and

²⁹ "Basic" was sometimes called "required presort," because use of bulk categories requires preparation even if no presort levels are achieved. Today, basic is referred to as "Mixed ADC." In reference to ECR, basic sometimes means CR; in reference to CR, basic sometimes means not-the-pallet-rate.

Nonprofit have been combined, though at different rates,³⁰ flats are in categories that are mainly flats, and the breakdown *within* is MxADC, ADC, 3-d, and 5-d, Carrier Route, High-Density, High-Density Plus, and Saturation. For the most part, non-automation is charged more than automation, and non-machinable is charged more than machinable. Dropship discounts have been instituted.

Despite this evolution, all steps of which were expected to make things better, flats have not fared well. If the technological improvements and cost-reduction initiatives since 1998 did nothing more than cover any effects from volume declines, one might expect the unit costs to have tracked the factor prices. But they did not. The factor prices increased about 76%, and the unit costs for flats, weighted to eliminate the effects of mix changes, increased a whopping 189%. At the same time, the unit costs for letters increased only 26%, and this during a period in which many believe the potential gains from letter automation were already realized. The explanations for this outcome, including allusions to lost scale economies, are of limited merit. Part of the problem, but not all of it, may be that the costing results are of limited validity. This possibility is supported by our discussion of anomalous costing results.

MM Flats in particular is troubled. It was once a host category. But, as we have explained, its volume has decreased substantially and it has almost lost out to private-sector competition. Most of its mail is entered at a point where only one sort is needed,

³⁰ Under current rules, Nonprofit rates are set so that, at the level of the class, the per-piece revenue of Nonprofit mail is, as nearly as practicable, 60% of the per-piece revenue of Commercial mail. The Commission reaffirmed this rule recently in Order No. 4400, when aspects of it were explored. Therefore, to the extent that the cost coverage of flats is a matter of concern, the situation could be improved significantly by charging Commercial rates to all Nonprofit flats, and reducing Nonprofit Letter rates a little to achieve the 60%.

and more could be. Its Commercial volume has declined more than its Nonprofit volume. Its city volume has declined more than its rural volume. Roughly it is tilting toward being for nonprofit mailers to reach rural areas.

Our opinion is that the Postal Service has not succeeded in designing and running a low-cost delivery system for flats. This has caused the cost coverage of the flats categories to decline to the point where some are under water, despite rate increases that have covered the factor price increases and then some. The solution is not to impose further rate increases on categories that have been submerged. Something needs to be done to re-engineer the Postal Service's processing system. Just tightening it is not likely to be enough. Short of that, the Postal Service must be allowed some flexibility in managing a very difficult situation.

VII. Conclusion.

Flats seem out of control. Despite years of study, investment, hand-wringing, changes to rules and presentment, and attention from every corner by the operator to the regulator to the inspector, reported results continue to worsen dramatically. Costs of flats are going up inordinately, in some years at nearly four times the rate of inflation. Over several years, flats cost increases have been double the increases in the prices of inputs (factor prices). Then recently, the agency admitted that it cannot quantify the financial impact of sizable investment and innovation for flat mail. Given the widely accepted management maxim that one cannot manage what one cannot measure, is this an acknowledgement by the agency that it cannot manage an important category of its workflow?

How is any part of this status quo acceptable to anyone? Were it not such a national tragedy, it might be a comedy. Our members are disconsolate, frustrated, and losing faith. More than ever before, they are seeking permanent alternatives to print mail. It is time for the hard questions to be asked ... and answered. Given the results, significant change is clearly required. A new trajectory and approach must be sought. While the ACMA filings raise some crucial issues and pose some important questions, we are under no illusion that we can outline a comprehensive remedy, but it is time for a solution to be found. Results must be improved or the natural conclusion is that this will end badly ... very badly for all involved, most especially for the originators of flats mail, their employees, and their suppliers.

ACMA calls on the Commission to escalate this matter and compel progress, or at the very least, demand analysis, straight answers, and solid data. The root cause, or causes, must be identified and corrective action must be taken. It may be that the numbers are simply incorrect. Whatever the cause, under these circumstances, penalizing a loyal and captive industry segment with extra rate increases is not the answer, and, as history has shown, would not be effective.

Respectfully submitted,

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