

BEFORE THE
POSTAL RATE COMMISSION
WASHINGTON, D. C. 20268-0001

COMPLAINT OF TIME WARNER INC. ET AL.
CONCERNING PERIODICALS RATES

Docket No. C2004-1

SURREBUTTAL TESTIMONY OF
HALSTEIN STRALBERG
ON BEHALF OF
TIME WARNER INC.,
CONDÉ NAST PUBLICATIONS, A DIVISION
OF ADVANCE MAGAZINE PUBLISHERS INC.,
NEWSWEEK, INC.,
THE READER'S DIGEST ASSOCIATION, INC.
AND
TV GUIDE MAGAZINE GROUP, INC.

November 8, 2004

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1 **AUTOBIOGRAPHICAL SKETCH**

2 My name is Halstein Stralberg. I am a consultant to Time Warner Inc. on issues related
3 to distribution of magazines through the postal system. For a detailed sketch of my
4 biography, please see my direct testimony in this docket (TW et al.-T-2).

5 **I. PURPOSE OF TESTIMONY**

6 The purpose of this testimony is to rebut claims made in the direct testimonies of
7 witnesses representing ABM, McGraw-Hill, NNA and the Postal Service. I show that
8 claims regarding a very large negative impact of the proposed rates on small
9 publications are exaggerated. I identify the mail piece preparation and mailing practices
10 most likely to cause large increases in postage under cost based rates and show that
11 most small mailers are likely to adjust quickly to the new rates and even benefit from
12 them.

13 I also address various other arguments raised by opponents of Periodicals rate reform.

14 **II. INTRODUCTION AND SUMMARY**

15 A frequently repeated claim in the intervenor testimonies in this docket is that the type
16 of rate structure proposed by Complainants would have a severe impact on many small
17 and medium sized publications. Furthermore, it is claimed that many of these
18 publications, lacking access to co-mailing or co-palletization facilities, would have no
19 way to adjust their mailing practices, or would be able to do so only by accepting a
20 severe deterioration in service.

21 Both witnesses Tang (USPS-T-2) and Bradfield (ABM-T-2) give examples of
22 publications whose postage, absent any change in mailing practices, would increase by
23 over 80%. Witness Crews (NNA-T-2), while presenting no calculations, describes a
24 small newspaper whose postage, again absent any change in mailing practices,
25 probably would increase by more than that. Tang and Bradfield have also presented
26 examples of many small and medium sized publications whose postage would increase
27 by much less, or even decrease, but neither offers significant insight into why the

1 impacts on different small publications differ by so much. Instead, the opponents of
2 reform seem to have simply assumed that the worst possible scenarios will be the norm
3 for small publications under cost based rates.

4 For example, Bradfield states that there is “no doubt that of the 25,000 or so outside-
5 county Periodicals in the mail, a good number would be staring at increases of the type
6 portrayed at the upper end of the range on my exhibit with no reasonable opportunity to
7 change their mailing practices.” ABM-T-2 at 6. That upper range which Bradfield refers
8 to is an over 80% increase, but as shown in the following, there are very specific
9 reasons, having less to do with size than with certain unnecessarily costly mailing
10 practices, why a few publications, absent changes in those practices, might face
11 increases of that magnitude under cost based rates.

12 I have analyzed several groupings of small, medium and large publications in order to
13 identify the distinguishing characteristics of those whose postage might increase
14 dramatically under the proposed rates, those whose postage would increase
15 moderately and those whose postage would decrease. Based on this analysis, it
16 became very clear that use of low-volume sacks (skin sacks), often containing just a
17 single bundle, is by far the predominant reason why some publications would see very
18 high postage increases under the proposed rates. Putting an end to this practice, i.e.,
19 using fewer but fuller sacks, would be the easiest way for such publications to adjust to
20 cost based rates of the type proposed by Complainants.

21 The use of “skin sacks” is in fact quite widespread. It is often justified as being
22 necessary for small publications to receive “adequate” service, though there is no firm
23 evidence that it does lead to faster delivery. Also, use of skin sacks is not limited to
24 time sensitive daily and weekly publications – it extends to many that are published
25 monthly and even less frequently.

26 Given the pervasive use of skin sacks, the large costs they impose on the Postal
27 Service and on the Periodicals class, and the often repeated claims that their use is
28 necessary for “service reasons,” two issues, one of fact and one of policy, need to be
29 considered by the Commission:

1 (1) Is it true that use of “skin sacks” leads to faster delivery of Periodicals, and if so
2 under what circumstances is it true and are there more economic ways to
3 provide adequate service?

4 (2) Is it appropriate that an individual mailer should be able to make unilateral
5 decisions (e.g., to mail with many small sacks rather than a few large ones) that
6 impose higher costs on the Periodicals class as a whole, without being asked to
7 accept the cost consequences of such decisions?

8 Another characteristic that influences whether a publication would face more or less
9 postage under the proposed rates is whether its mail pieces are machinable on AFSM-
10 100 machines. Machinability is not considered in the current rate structure, yet with the
11 emergence of AFSM-100 as a much more efficient flats sorting method than any
12 previously available, compatibility with those machines has become an important driver
13 of costs for all flats except those that are presorted to carrier route. If a publication
14 uses a mail piece format that is incompatible with the most advanced processing
15 technology currently available, it will incur higher costs and, as with the use of skin
16 sacks, one must question whether it should be able to impose those higher costs on the
17 rest of the class (including Periodicals that have modified their own mail piece format in
18 order to be machinable).

19 On the other hand, I believe it may be possible to relax some of the criteria for
20 machinability, as specified in the DMM, to recognize the full range of flats that in fact
21 can be and are being sorted on the AFSM-100 machines.¹

22 As my analysis will show, circulation size is only one factor, and not even the most
23 important factor, in determining how a publication would be affected by a cost based
24 rate structure such as that proposed in this docket. Nor does lack of access to co-
25 mailing and co-palletization doom a small publication to paying much more under cost
26 based rates, though access to such services may help produce further savings as well
27 as opportunities for dropshipping. Among the publication mail.dat files provided by

¹ As I pointed out in my response to ABM/TW et al.–T2-9 (Tr. 1/85), AFSM-100 machines do handle flats much heavier than the 20 ounce limit specified in the DMM, as long as those pieces meet the dimensional requirements. I have observed magazines weighing almost 2.5 pounds being sorted on the AFSM-100 without apparent problems, whereas flats that exceed the specified length, width and thickness limits will not be sorted on those machines.

1 ABM I found, for example, a nationwide mailing of 48 pieces that would pay less under
2 the proposed rates than under current rates.²

3 There are several components to the Periodicals rate reform proposed in this docket
4 through the testimony of witness Mitchell. I believe it may be useful for the
5 Commission, in its deliberations, to consider not only the overall impact on various
6 publications but also what it is about the proposed changes that would require certain
7 types of publications to pay more (or less) than they currently do. For this reason, as
8 explained in Section III below, I developed a version of the proposed rates that retains a
9 flat editorial pound rate.

10 Section IV describes my analysis of the impact of the proposed rates on different types
11 of publications and attempts to identify the characteristics of publications whose
12 postage would increase and what they might be able to do about it.

13 Section V examines the question of whether Periodicals time to delivery really is
14 improved by mailing them in very small sacks that travel far into the system, and the
15 particular circumstances under which this might be true.

16 Section VI addresses various other issues raised by opponents, while Section VII
17 summarizes my conclusions. Along with this testimony I have prepared seven library
18 references whose content and purpose are explained in later sections. Some of these
19 must remain subject to limited access in order to honor confidentiality agreements.

20 **III. ISOLATING THE IMPACT OF ZONED EDITORIAL POUND RATES**

21 The alternative rate structure for Periodicals flats presented by witness Mitchell and
22 proposed by Complainants in this case differs from the current rates in two main
23 respects.

24 (1) It disaggregates the current rates by introducing separate unit charges for
25 bundles, sacks and pallets, as well as for mailpiece non-machinability, and by
26 recognizing additional presort levels and entry point categories. To

² For a discussion of these files, see Section IV.3 below.

1 compensate for the new bundle, sack and pallet charges, the revenues drawn
2 from the piece and pound rates are reduced.

3 (2) It uses zoned editorial pound rates, while maintaining the overall preference
4 given to editorial matter.

5 I believe both these changes will benefit the Periodicals class, including publications
6 that in the short run might experience higher rates. However, in order to analyze and
7 understand how these changes would affect different types of publications, it may be
8 useful to consider them separately. For example, as I show in Section IV, many small
9 and medium sized publications, including more than half of the ABM publications I
10 analyzed, would immediately, with no change in mail preparation practices, experience
11 lower postage if only the first set of changes were implemented. But because most of
12 these publications today do little or no dropshipping, the proposed zoning of editorial
13 pound rates would raise their postage. On the other hand, many small regional
14 publications would pay less under zoned editorial pound rates.

15 To facilitate analysis of these issues, I developed another rate structure that retains all
16 the features presented by witness Mitchell, except that the editorial pound rate is the
17 same for all zones. I determined the value of this editorial rate by calculating the total
18 pound rate revenues produced by editorial matter in Mitchell's rate design spreadsheet,
19 then dividing by the total number of outside county editorial pounds. This gave an
20 editorial pound rate equal to 12.95 cents.³ The calculations are shown in library
21 reference TW et al. LR-5, which contains an Excel spreadsheet that is a modified
22 version of Mitchell's rate design spreadsheet.

23 I analyzed the impact, both of the proposed rates and of a modified schedule with the
24 editorial pound rate equal to 12.95 cents across all zones, on different groups of
25 publications, as described below.

³ Note that since the total revenues extracted from the pound rates are less than under current rates, due to some revenues being extracted from bundle, sack and pallet charges, it is not possible for the editorial pound rate to have the same value (19.3 cents per pound) as in current rates. If used in an actual rate schedule, the 12.95 would be rounded to the nearest tenth of a cent. However, I used the more exact value in the analyses described below.

1 **IV. IMPACT OF PROPOSED RATES ON DIFFERENT TYPES OF PUBLICATIONS**

2 In response to interrogatories filed by ABM in an earlier stage of these proceedings, I
3 developed estimates of how the proposed rates would impact each publication owned
4 by the Complainants. Tr. 1/72-75, 112-31. In the following I discuss the likely impact,
5 assuming no change in mailing practices, on several additional groups of publications:

- 6 (1) 251 publications of all sizes, randomly selected from the universe of all outside
7 county publications, by witness Tang;
- 8 (2) 153 small and medium sized publications belonging to five ABM member
9 companies, analyzed by employees in each of those companies;⁴
- 10 (3) 154 ABM publications whose mail.dat files were made available by ABM
11 counsel; and
- 12 (4) Small newspapers, focusing in particular on a “typical” such newspaper
13 described by witness Crews (NNA-T-2).

14 Determining how a publication would be affected by the proposed rates is a non-trivial
15 exercise, because many of the data elements needed (e.g., number of bundles, sacks
16 and pallets at each presort level) are not available from mailing statements (form 3541).
17 Most of that information is, however, available from mail.dat files. After the January
18 filing of the present complaint, I developed a simple tool to analyze the impact of
19 different Periodicals rate structures on individual publications using mail.dat files. The
20 method involves essentially three steps: (1) importing components of the mail.dat file
21 into a Microsoft Access data base; (2) executing various Access query programs; and
22 (3) copying the query results into an Excel spreadsheet, which then calculates postage
23 under the current and proposed rates and the percent increase or decrease.

24 My initial intention was simply to use this fairly primitive tool to analyze the impact on
25 some Time Inc. publications. But after the January filing Time Inc. received a number
26 of inquiries about how to determine the impact of the proposed rates. It was decided to
27 make the “tool” available to anyone in the industry who wanted it. Because of concerns

⁴ Summaries of the analyses performed have been made available, though the original data on which the analyses were performed have unfortunately been destroyed. See response to TW et al./ABM-68 (filed September 28, 2004).

1 that the “tool” was too complex and that many small publications, including newspapers,
2 do not use mail.dat files, I also developed a simpler tool, consisting of just an Excel
3 spreadsheet, which was made available to NNA.

4 It is now known that McGraw-Hill and at least five other ABM members used the above
5 mentioned tool to analyze the potential impact of the proposed rates on some of their
6 publications. The Postal Service, with more resources and access to more data,
7 appears to have developed a different and more powerful methodology for the
8 estimates provided by witness Tang, while NNA does not appear to have completed
9 any numerical impact analysis.

10 1. Impact On Publications Selected By Tang (USPS-T-2)

11 Witness Tang has presented estimates of the impact of the proposed rates on 251
12 publications, selected through a “random” process to include representative small,
13 medium and large publications, with each group further classified as having “high” or
14 “low” density. Tang estimated the percent increase for each selected publication if the
15 proposed rates were implemented and concluded that “small” publications generally
16 would be worse off than “medium” size publications, which again would be worse off
17 than “large“ publications. Tang’s summary tables indicate that small publications could
18 face postage increases as high as 89.96%, or postage decreases up to 15.87%, with
19 76 out of 101 “small” publications facing increased postage. At the same time, she
20 concludes that most large publications would face lower postage, with decreases up to
21 36.37%, though they could also face increases up to 27.86%.⁵

22 Tang points out that there are many more small publications than large ones, concludes
23 that the smaller publications would be most adversely impacted, and states that while
24 the Postal Service generally is favorably disposed towards the type of rate reform being
25 proposed, it is necessary to consider the impact on all types of publications. She
26 makes it clear that she prefers a more gradual approach and praises the Postal
27 Service’s own efforts at reducing costs and nudging customers towards more efficient

⁵ Response of Postal Service Witness Tang to POIR No. 2, item 2 (filed October 15, 2004). Tang originally analyzed 55 publications. The sample was expanded to 251 at the Commission’s request.

1 mail preparation, as in the two co-palletization cases. USPS-RT-2 at 1, 7-9.

2 But Tang reports no attempt to consider how different publications might respond to the
3 establishment of cost based rates such as those proposed in this docket, or the extent
4 to which publications might have the ability to modify their mailing behavior so as to
5 avoid high increases. I find it surprising that she displayed no curiosity as to how it is
6 possible that some “small” publications could face postage increases of almost 90%
7 while other equally “small” publications face postage decreases of almost 16%.

8 In response to interrogatories, Tang has provided additional information about her
9 sampled publications and the logic employed in selecting them. As explained below,
10 the information provided is sufficient to identify the main distinguishing characteristics of
11 publications that would experience large increases under the proposed rates and those
12 that would not.

13 Tang’s additional data are in an Excel spreadsheet that was submitted under protective
14 conditions in USPS LR-1. My detailed calculations that extract from Tang’s data the
15 summary information presented below are included in TW et al. LR-6, which must be
16 subject to the same conditions.

17 Tang’s “small” publications include 51 with “low” and 50 with “high” density. Table A-1
18 in Exhibit A summarizes some key mailing characteristics of the small “low density”
19 publications, while Table A-2 shows similar characteristics for the small “high density”
20 publications. Both tables tell similar stories.

21 In both tables, the left column gives the publication number, corresponding to the
22 number in the left column of Tang’s revised Table 8, in her response to POIR-2. The
23 second to last column gives Tang’s estimates of the percent increase or decrease each
24 publication would experience, assuming no change in mailing practices, under the
25 proposed rates. The last column provides similar estimates for rates that retain a flat
26 editorial pound rate but in all other respects are identical to the proposed rates, as
27 explained in the preceding section. The rows in both tables have been sorted
28 according to the magnitude of the percent increase/decrease under the flat editorial rate
29 scenario described above. The remaining columns contain characteristics that in my

1 opinion are the most relevant drivers of whether or not a publication's postage would
2 increase or decrease.

3 Let us look at the top rows in Table A-1, which contain the publications whose percent
4 increases would be largest. These publications tend to use sacks with few pieces and
5 few bundles; in fact many of them have exactly one bundle per sack. The first twelve,
6 all with high percentage increases, have less than two bundles per sack. The next row
7 might appear to be an exception with 7.71 bundles per sack, but this publication would
8 experience a high increase for other reasons.⁶

9 As one moves further down in this table there are more bundles and more pieces per
10 sack, and the percent increases, especially under the flat editorial pound rate scenario,
11 are lower and turn into decreases in the lower part of the table. Again, there are some
12 exceptions. For example, publication 175 has only one bundle per sack, yet would
13 experience only a very small postage increase, or a decrease under the flat edit
14 scenario. However, in this case the one bundle has 35.5 pieces on the average. As I
15 found also in the case of the ABM publications discussed below, publications with 35 or
16 more pieces per sack tend to have either single-digit postage increases or no increase
17 at all under the proposed rates.

18 Table A-2 contains 50 "small" publications with "high" density and confirms the trends
19 described above. Of the top 17 publications, all with high increases, twelve have
20 exactly one bundle per sack (or less) and all except one (non-machinable) publication
21 have less than two bundles per sack. And again, as we move further down in the table,
22 where increases are smaller and eventually turn into decreases, the publications are
23 using fuller sacks.

⁶ This publication has the following against it: (1) its pieces are non-machinable, meaning that they cost more to sort; (2) it is lightweight, meaning that piece sorting costs dominate over pound related costs; and (3) it has very low volume (circulation of 1,532) and low density, meaning that most of its pieces have only ADC or MADC presort and therefore require many piece sorting operations, each of which must be done manually or on the slower FSM-1000 machines. Current rates do not recognize non-machinability as a cost causing factor.

1 Since there are many factors that contribute to how a publication would be affected by
2 the proposed cost based rates, the trends discussed above are not perfect; i.e., there
3 are some exceptions. Generally, however, it is clear that the very high increases shown
4 by Tang, like the similarly high increases cited by ABM witnesses, will not occur if
5 publications, in response to more cost based rates, stop using low volume sacks and
6 instead, when palletization alternatives do not exist, use fewer and fuller sacks with
7 lower presort. Such sacks will be opened at an earlier stage, letting the mail travel as
8 bundles and loose pieces, which the Postal Service can sort much more cheaply than
9 sacks.

10 What surprises me most about Tang's data is not that the practice of carrying only one
11 bundle in each sack would lead to higher postage under cost based rates but that the
12 practice is as widespread as it must be if Tang's samples of small publications are truly
13 representative. Clearly, this practice contributes significantly to Periodicals costs.
14 Eliminating it would reduce those costs, benefiting all members of the Periodicals class.

15 I understand that many mailers believe that using small sacks with high presort levels is
16 necessary for service reasons. Given that this perception is so widely shared, it may
17 not be so surprising that many daily and weekly publications would act on it. But of the
18 22 publications in the two tables that use exactly one (or less) bundle per sack, there
19 are four dailies, four weeklies, six biweeklies and eight monthlies. One would think that
20 at least the monthlies and biweeklies could use fewer sacks. Moreover, there are other
21 dailies and weeklies that use much fuller sacks (more bundles and pieces per sack)
22 and therefore would not experience such large increases under the proposed rates.

23 2. Publications Studied By ABM Members

24 Bradfield (ABM-T-2) included in his testimony a four-page exhibit (LB-1) that purports to
25 summarize an analysis of the impact of the proposed rates on 153 ABM publications.⁷

⁷ Bradfield's exhibit has 144 entries. ABM has pointed out that one entry was repeated four times, i.e., the number of distinct entries is only 141. But ABM also states that two of the entries represent groups of co-palletized titles, and counting each of those titles separately gives a total of 153 publications. See, e.g., Errata to Objection of American Business Media to Requests for Production: Time Warner et al./ABM-T2-3 (filed September 27, 2004).

1 The exhibit shows that most of them would experience higher postage and that for
2 some the increases would be huge (over 80%). But it offers little insight into why some
3 would experience such high increases while others would not, and one might be left
4 with the impression, after reading the three ABM testimonies, that these publications
5 would get higher postage only because they are small, and that they would be unable,
6 at least in the short run, to make the changes needed to avoid paying much higher
7 postage.

8 After extensive interrogatories to ABM and its witnesses, it became clear that the
9 results in Bradfield's exhibit cannot be replicated or verified, because the mail.dat files
10 on which they were based have been deleted, along with most of the files containing
11 intermediate results. Exhibit LB-1 apparently was created by a clerk in ABM's counsel's
12 office, based on results provided by employees of four ABM companies who each had
13 analyzed some of the publications owned by their respective companies, using the
14 Access query method described above.⁸ It appears that the most complete record of
15 this study is an Excel spreadsheet file called 1f1sg01.xls, which apparently also was
16 made up by the above mentioned clerk. Although provided to me some time ago, it has
17 not previously been made part of the record in this docket. It will be filed as library
18 reference TW et al. LR-7.

19 Spreadsheet 1f1sg01.xls has four worksheets, each containing an analysis of certain
20 publications from one of the four participating ABM companies⁹. The format and
21 information presented are different on each worksheet, but all four contain the minimum
22 information per publication that went into Exhibit LB-1. Bradfield and McGarvy (ABM-T-
23 3) appear to have contributed two of the four worksheets with analysis of publications
24 from their respective companies. In the following I will focus on the information
25 presented in the two other worksheets, actually sheets one and four. Those sheets

⁸ Response to TW et al./ABM-T2-8 (filed September 28, 2004).

⁹ According to McGarvy there were actually five ABM member companies involved, but because the fifth one, IDG, publisher of ComputerWorld, InfoWorld and NetworkWorld, had some difficulties, McGarvy performed the analysis for them and included those three publications as lines 88-90 in Exhibit LB-1. See ABM-T-3 at 8-9 and Response to TW et al./ABM-68(j) (filed September 28, 2004).

1 have the most detailed information, besides representing most of the publications that
2 were analyzed. They are reproduced in Exhibit B as Tables B1 and B2, representing
3 respectively entries 116 through 144 and entries one through 75 in Exhibit LB-1. In
4 both tables, the first column contains a number that corresponds to the publication
5 number in Bradfield's exhibit. This and other facts cited below were confirmed by ABM
6 in its responses to TW et al./ABM-69-70 (filed October 15, 2004) and can be verified
7 by examining the tables.

8 In Table B-1, the five highest percent increases under the proposed rates are,
9 respectively, 81%, 65%, 38%, 28% and 16%, for publication numbers 121, 128, 119,
10 144 and 136. For these publications, the value of the "sack minimum" parameter is
11 equal to 6, while it is equal to 24 for all the other publications in the table (except
12 publication 131, for which the parameter is not specified). The average number of
13 pieces per sack for the five publications with the highest increase is shown in the table
14 as either 13 or 14, while it ranges from 38 to 66 for all the other publications. In other
15 words, there is a very direct correlation between low sack minimums (a parameter set
16 during the fulfillment process), low sack contents, and high postage increases under the
17 proposed rates. Note also that the five publications with low sack contents all are
18 monthlies, while the one weekly in this sample (publication 131) uses much fuller sacks
19 (42 pieces per sack).

20 Table B2 represents more than half the entries in Bradfield's exhibit. Seven of these
21 publications, numbered as 58 and 70 through 75, are shown with postage increases
22 over 20% under the proposed rates, while none of the 68 others would have increases
23 higher than 13%. Publication 58 is shown with a sack minimum of six, publications 70-
24 75 with minimums of 12 and all other publications, with much lower increases, use 20 or
25 24 as sack minimums. Furthermore, the seven publications with the highest increases
26 are published no more frequently than twice a month and four are published monthly.
27 The one daily publication in this sample happens to use much fuller sacks.

28 To summarize, the very high potential postage increases for some publications, referred
29 to by Bradfield and the other ABM witnesses, are directly correlated with the practice of
30 using "skin sacks." Furthermore, the publications that engage in this practice, at least

1 as far as these two exhibits are concerned, are not particularly time sensitive, and so
2 claims that “skin sacks” are used because “service reasons” make it necessary to use
3 them seem to have little or no merit.

4 All of these conclusions are, of course, fully consistent with those indicated by Tang’s
5 much wider selection of publications. In both cases, I believe it is fair to conclude that
6 the very high potential increases referred to by opponents of the proposed rate
7 restructuring simply will not occur. They won’t occur because they can be avoided by
8 the very simple action of using higher sack minimums in the fulfillment process,
9 something that does not require any capital investments or access to co-mail/co-
10 palletizing services and likely would be done very quickly if the proposed rates were to
11 become reality. See also witness O’Brien’s testimony (TW et al. RT-1) regarding the
12 use of sack minimums.¹⁰

13 Based on the above observations, it is easy to see the fallacy in Witness Cavnar’s claim
14 that “many Periodicals mailers would see their rates increase above the Standard rates,
15 creating it would seem, an ECSI penalty” (ABM-T1 at 21). When asked what analysis
16 he had done to reach this conclusion, Cavnar stated that he had done no analysis and
17 did not need to because of his “experience.” He noted that 15 percent of the
18 publications in Exhibit LB-1 are shown with increases over 20% and 8% with increases
19 over 40%, speculated that those percentages would apply to 25,000 publications and
20 cited an industry rule of thumb that Standard rates are about 20% higher than those for
21 Periodicals. Cavnar claimed this showed the accuracy of his original claim. Response
22 to TW et al./ABM-T1-8 (filed September 28, 2004).

23 What Cavnar apparently did not consider is that “skin sacks” are not used for Standard
24 flats, which are subject to the 125 pieces or 15 pounds sack minimum, as spelled out in
25 DMM sections M610.4 and M820.5. The publications that are shown with 20%

¹⁰ It is interesting to note that “sack minimum” is not a parameter in the mail.dat files but rather is used by the fulfillment programs that produce mail.dat files. That three of the four ABM analysts who contributed to Bradfield’s exhibit chose to include the “sack minimum” parameter while deleting so much other information indicates that they already do realize the importance of sack minimums and their impact on postal costs.

1 increases or more in Exhibit LB-1 would get those high increases precisely because of
2 their use of low volume sacks. Were they to switch to Standard rates they would be
3 forced to use much larger (and fewer) sacks; that, of course, would make them more
4 efficient and would leave them with much lower postage under the proposed Periodicals
5 rates, thus eliminating any motivation to switch to Standard. Cavnar claimed he was
6 “not surprised” when presented with the above facts. Response to TW et al./ABM-T1-
7 10 (filed October 15, 2004).

8 3. Analysis Of Publications Whose Mail.Dat Files Were Provided By ABM

9 ABM provided, in response to TW et al./ABM-4(b) (filed August 31, 2004), a CD
10 containing 155 folders with mail.dat files of ABM publications from 2001. It is
11 unfortunate that Complainants, despite extensive efforts, could not persuade ABM to
12 provide a representative set of more current mail.dat files. However, ABM counsel has
13 argued that the older files he did provide are also representative of ABM publications
14 today.¹¹ As explained below, while newer files would have been preferable, I was able
15 to extract considerable information from the older data that show how ABM publications
16 would be affected by and how they might adapt to cost based rates. In fact, the
17 conclusions from this analysis are straightforward and in complete accord with those
18 reported above.

19 I used the mail.dat files to analyze 154 publications. As with the publications selected
20 by Tang, I estimated the potential impact (again assuming no change in mailing
21 practices) of the proposed rates with and without zoned editorial pound rates.¹²

¹¹ See Answer Of American Business Media To Motion Of Time Warner Inc., Et Al. To Compel Production Responsive To Time Warner Et Al./ABM-5(c) And Time Warner Et Al./ABM-68(k) (filed October 12, 2004), at 9.

¹² There were 155 folders on the CD provided by ABM. In two of these, the mail.dat files were incorrigibly corrupted. One folder contained mail.dat files for two different groups of co-palletized publications. I treated these as two publications, giving a total of 154 analyzed. Were one to count separately each member of the two co-palletized files, the number would be over 160. Some folders contained many mail.dat files representing different mailings of the same publication. In each such case I analyzed the mail.dat files separately and then combined the results to represent the total mailed volume for the given publication.

1 According to my results, more than half of these ABM publications would actually pay
2 lower postage than they do today if the proposed rates were implemented without the
3 zoned editorial pound rates. However, since these publications are mostly distributed
4 nationwide and do little dropshipping, 85% would pay higher rates when the zoned
5 editorial pound rate is included. And, consistent with earlier observations, the
6 publications that would pay very large increases are, in practically all cases, the ones
7 that use low-volume “skin sacks.”

8 My analysis is supported by several library references, some of which must remain
9 subject to protective conditions based on the Complainants’ agreement with ABM. TW
10 et al. LR-8 is the CD with mail.dat files that was provided by ABM counsel. TW et al.
11 LR-9 is a CD that contains the Access databases I created from those files. TW et al.
12 LR-10 is an Excel spreadsheet that contains the detailed analysis results for 154 ABM
13 publications (one worksheet per publication).¹³

14 Table C-1 summarizes the results of my analysis. It is similar to the two tables that
15 describe Tang’s selection of small publications. For further consistency with Tang’s
16 results, I classified an ABM publication as small (S) if the mailed volume in the files
17 studied was less than 15,000, as medium (M) if it was between 15,000 and 100,000,
18 and large (L) if it was over 100,000. As can be seen from the table, most ABM
19 publications are in the medium size category according to these definitions.¹⁴

20 Applying the volumes indicated by the mail.dat files and the number of issues per year,
21 I estimated that these publications represent an annual volume of 139 million pieces,
22 with an average piece weight of 0.489 pounds. Somewhat surprisingly, about 62% of
23 these pieces are entered on pallets, not in sacks. 115 out of the 154 entries placed at
24 least some volume on pallets and 67 placed more than half on pallets. Since these

¹³ These library references will be filed upon approval by the Commission of appropriate protective conditions jointly requested by Complainants and ABM.

¹⁴ I have avoided inclusion of actual mail volumes in Table C-1 because they conceivably could enable someone familiar with the industry to identify specific publications, which would be contrary to the confidentiality agreement under which the mail.dat files were obtained from ABM. Table C-1 is developed in the spreadsheet in TW et al. LR-10, on the worksheet labeled “results.”

1 files are from 2001, before the pallet discounts currently in effect, one might expect a
2 higher percent on pallets today.

3 The 154 entries in Table C-1 are organized according to how much postage would
4 increase under the proposed rates without zoned editorial rates, as shown in the last
5 table column. I organized them that way because it is obvious that the effect on a
6 publication of zoning the editorial pound rates depends on its weight, editorial content
7 and the degree to which it currently is dropshipped. The last column in Table C-1
8 therefore shows the combined effect of all the other rate structure changes proposed in
9 this docket. The second to last column shows the effect when zoned editorial rates are
10 included.

11 Let us examine the top entries in Table C-1, all of which would experience high postage
12 increases, with or without zoned editorial rates. What all these publications have in
13 common is that they use sacks with little in them. Consider for example the top twenty
14 entries. These are all the publications whose increase would be above 20% without the
15 zoned editorial rates, and all but one of the publications that would have increases
16 above 20% when zoned editorial rates are included. None of these top twenty
17 publications has more than 1.63 bundles in an average sack; most of them have
18 averages closer to 1.0.

19 Or, consider the first 31 table entries. What they have in common is that they either
20 have less than 1.71 bundles per sack, or their pieces are non-machinable, or both.
21 They are also all the publications whose increase in the last column exceeds 8.16%.

22 And, again similar to the conclusions indicated by Tang's data, non-machinability of
23 mail pieces is another reason why some publications would see higher postage under
24 the proposed rates, though its impact seems to be less than the impact of the use of
25 skin sacks. I identified 27 of the 154 publications as non-machinable, based on DMM
26 criteria and the mail piece length, width and weight information given in the mail.dat
27 files. It is interesting that most of the non-machinable ABM publications were classified

1 as non-machinable not because of extra weight but because of extra width.¹⁵
2 Publications obviously have a reason for using unusual formats, such as extra width,
3 but it seems only fair that they should pay the extra costs that such formats cause
4 because of their incompatibility with the AFSM-100 machines.

5 One of the mail.dat files provided by ABM showed a mailing, to all zones, with a total of
6 only 48 pieces, all mailed in a single mixed ADC sack. It turns out that this mailing
7 would do quite well under the proposed rates. It is the very last entry in Table C-1. Its
8 postage would decrease by 5.85% under the proposed rates and by 14.57% under the
9 proposed rates minus the zoning of editorial rates. I mention this here only to illustrate
10 that the implied claim that very small publications would be the hardest hit by the
11 proposed rates simply is not true.¹⁶

12 Finally, let me address the question of whether these ABM files, which date back to the
13 first half of 2001, before R2001-1 had even been filed, are representative of the
14 situation today. In fact, I would have had more concern over having been given only
15 "old" data by ABM were it not for the fact that the conclusions they produce are fully
16 consistent with the conclusions that emerge from Tang's data as well as the available
17 information on ABM's own study with more recent data, as described in previous

¹⁵ The DMM defines length as the dimension parallel to the folded/closed edge of a publication or catalog, and requires that it be no more than 15 inches in order to be AFSM-100 machinable. The dimension perpendicular to the length, called "height" in the DMM but "width" in the mail.dat specs, cannot exceed 12 inches. Most of the 27 non-machinable publications referred to above have "width" equal to 15.75 inches. As I understand it, flats that are that wide are non-machinable because they will not fit in the compartments that flats travel in around the AFSM-100 carousel.

Because "length" and "width" were not specified in all mail.dat files, there may be additional non-machinable publications that I could not identify.

¹⁶ Since the calculations that produce the estimated impact on this publication are in the library references that I believe must remain under protective conditions, I will give its detailed characteristics here. The percent editorial content for this publication (as for several other publications studied) was not specified in the mail.dat file. I therefore assumed it to be equal to 50%. Other specifications necessary to verify the results in Table C-1: Weight per piece: 1.14 lb. The pieces appear to meet all criteria for machinability. Piece presort level and pre-barcoding: 5 pieces with (MADC, nonauto), 37 with (MADC, auto) and 6 with (ADC, auto). Four MADC bundles and one ADC bundle. One MADC sack. Zone distribution: 25% zone 1&2, 16.67% zone 3, 4.17% zone 4, 10.42% zone 5, 6.25% zone 6, 6.25% zone 7 and 31.25% zone 8.

1 sections. ABM has also indicated that it believes the mail.dat files I used are
2 representative and that in fact many of the publications studied are the same as those
3 ABM witnesses analyzed this year.¹⁷ It may, however, be worth mentioning some of the
4 things that are likely to have changed:

- 5 (1) Although the average palletization was already at 62% in 2001, it would appear
6 likely to have increased following the establishment of the pallet discounts in
7 R2001-1.
- 8 (2) Because DADC entry was neither separately recognized nor rewarded in 2001,
9 I was unable to determine the degree to which the 154 publications do use
10 DADC entry. Additionally, I would expect the use of DADC entry to be more
11 frequent today than it was in 2001.
- 12 (3) Because R2001-1 introduced dropship incentives that apply only to mail that
13 also is palletized, I would expect ABM's palletized volume to be more
14 dropshipped today than it was in 2001.

15 But if, as seems likely, ABM publications are more palletized and dropshipped today
16 than in 2001, then one would expect them to do better, not worse, under the types of
17 cost based rates proposed in this docket.

18 In conclusion then, I believe, based on this analysis, that ABM publications generally
19 are better equipped to adapt to and even profit from cost based rates than its witnesses
20 appear to realize. Many of them follow mailing practices that would need to change, but
21 those practices will change when the right incentives are put in place.

22 4. Impact on Small Newspapers

23 As described by witnesses Heath (NNA-T-1) and Crews (NNA-T-2), small rural
24 newspapers make extensive use of sacks, especially for copies mailed to destinations
25 far from their home base. The reasons include:

- 26 (1) their volume is far too low for palletization to be a viable option; and
- 27 (2) there is a perception, unconfirmed by any systematic study but encouraged by

¹⁷ See Answer Of American Business Media To Motion Of Time Warner Inc., Et Al. To Compel Production Responsive To Time Warner Et Al./ABM-5(c) And Time Warner Et Al./ABM-68(k) (filed October 12, 2004), at 9. However, in checking out the web sites that almost all of these publications now have, I found that a few of them no longer exist in hard copy form at all.

1 some postal managers and evidently shared by these witnesses, that their mail
2 will be delivered faster if it is entered in low-volume sacks with high levels of
3 presort that travel further into the postal system before they are opened.

4 My comments below focus mostly on a single local newspaper, namely the Cameron
5 Citizen Observer in western Missouri. I focus on that paper because Crews describes it
6 as typical and has provided detailed information on its current mailing practices. NNA-
7 T-2 at 6 ff. It also appears to fit Heath’s description of a typical small rural newspaper.
8 NNA-T-1 at 2, 8.

9 The Cameron Observer serves primarily a four-county area, using in-county rates for
10 copies to Clinton county. It also has subscribers in various other parts of the country,
11 including so-called “snowbirds,” who reside in warmer climates during the coldest
12 months of the year. There are a total of 364 outside county copies each week.¹⁸
13 Crews expresses particular concern about whether, under proposed rates, the
14 newspaper would be able to continue to serve subscribers who live far away, including
15 the “snowbirds.” Seven subscribers in Zone 7 are the furthest away from Cameron. He
16 speculates, assuming that these subscribers would be served by an ADC sack, that
17 their postage would increase by 46 cents per copy, or \$20 per year. He further
18 speculates that the increase would be passed on to these subscribers and would cause
19 most of them to be lost.

20 In response to TW et al./NNA-T2-2, Crews confirms that the sack charges for the seven
21 subscribers would be 2.2 cents per copy, rather than 46 cents, if those copies were
22 entered in a mixed ADC sack, along with the 61 copies that are mailed to zones 3-6.
23 However, he adds that:

24 experience would suggest the service would be so slow and unpredictable that
25 the publisher would not likely be able to retain those subscribers. Most likely,
26 then, the cost would be zero, as that mail would cease to exist.

27 Response to TW et al./NNA-T2-2(e) (filed September 30, 2004).

28 However, in response to other interrogatories, Crews provided a detailed breakdown of

¹⁸ Response of Witness Crews to TW et al./NNA-T2-4(d) (filed September 30, 2004).

1 the sacks and sack presort levels currently used to mail the Cameron Observer,
2 including the use of nine mixed ADC sacks containing a combined total of 81 copies.
3 He confirmed, in the end, that the seven Zone 7 copies in fact already are mailed in one
4 of those mixed ADC sacks. He also agreed that whether one divides 81 copies over
5 nine mixed ADC sacks or puts them all in one such sack makes no difference with
6 regard to service (though it does affect costs), because those sacks are all dumped on
7 the same belt in the same processing plant. Finally, he agreed that if the proposed
8 rates were to take effect, the 81 copies would start to be mailed in one sack rather than
9 nine. In summary, the seven Zone 7 subscribers are already being served the way
10 Crews thought would have catastrophic consequences. Responses of Witness Crews
11 to TW et al./NNA-T2-8-9 (filed October 21, 2004).

12 Neither Crews nor Heath has provided any numeric analysis to substantiate their
13 predictions of catastrophic consequences if the proposed rates were implemented. I
14 have performed such an analysis on the 81 copies of the Cameron Observer that are
15 currently mailed in mixed ADC sacks. These are the copies with the lowest density and
16 the ones that would be most affected by the zoning of editorial pound rates. How much
17 more would the Observer have to pay for mailing of these copies under the proposed
18 rates? Excel spreadsheets supporting the estimates cited below are provided in library
19 reference TW et al. LR-11.

20 Crews indicated a total of 68 copies that are mailed to Zones 3-7. That is 13 short of
21 81, and I therefore assumed the remaining 13 go to Zones 1&2. Using the average
22 piece weight (4.6 ounces) and advertising percentage (50%) indicated by Crews,
23 assuming furthermore that the copies currently pay the basic non-auto piece rate, I
24 estimated total current postage for the 81 copies to equal \$33.48 per issue. Assuming
25 further that the copies are non-AFSM-100 machinable (as are most newspapers) and
26 that they are entered in two mixed ADC bundles in one mixed ADC sack, the postage
27 under proposed rates would be \$39.73 per issue, an 18.7% increase. The increase
28 would of course be much higher if the 81 copies continued to be mailed in nine different
29 sacks but, as confirmed by Crews, they would not.

30 The main reason the 81 copies would cost more than at present, even after eliminating

1 the unnecessary sacks, is that I have assumed they are non-machinable. Were they
2 machinable, their postage would be only \$29.20, a decrease of 12.8%.¹⁹

3 Finally, I assumed above that the 81 copies have no bundle presort beyond the mixed
4 ADC level. However, the Cameron Observer's remote subscribers apparently do live in
5 certain clusters, which might make some bundle sorting to at least the ADC level
6 feasible. And Crews indicates, as explanation for the nine mixed ADC sacks, that
7 "these sortations were originally set up by state, to try to achieve the most direct
8 transportation route and downstream processing as possible."²⁰ Let us assume,
9 therefore, that the 81 copies can be divided among nine ADC bundles, but that they still
10 are mailed in one mixed ADC sack. In that case, postage under the proposed rates
11 would be \$32.45, or 3.1% lower than currently, even with the assumption of non-
12 machinability. If the pieces were in ADC bundles, using one MADC sack, and if they
13 were also machinable, their postage would be 14.19% less than under current rates.

14 To summarize, even the portion of a local newspaper that would appear most
15 vulnerable to cost based rates would not have to pay significantly more than at present,
16 and might even pay less, if it simply avoids using many low-volume sacks.²¹

17 This still leaves the question of whether the 81 copies could be delivered faster if they
18 were mailed in many low-volume sacks. I tend to believe that they would not. Some
19 reasons supporting that belief are discussed below.

20 Consider first the other newspaper described by Crews, the Atchison County Mail.
21 Crews reports that this local paper, whose outside county circulation is about the same
22 as for the Cameron Observer, made an agreement with the local postmaster to enter its
23 copies in tubs, rather than sacks. After the switch to tubs there have been very few

¹⁹ Non-machinability is a problem with the newspaper format under present processing technology. It will become a much bigger problem if the Postal Service one day automates the carrier in-house function, through, for example, the FSS or DPP approach.

²⁰ Response to TW et al./NNA-T2-9 (filed October 21, 2004).

²¹ The rest of the 364 outside county copies are local and would, for example, benefit from the zoning of editorial rates.

1 service complaints. There are actually two tubs, one to mixed ADC and one to St
2 Joseph, the local SCF. In other words, there is a mixed ADC tub and an SCF tub.²²
3 But the mixed ADC tub, as confirmed by the Postal Service, would be dumped on a belt
4 in the processing plant (St. Joseph), the same belt that a mixed ADC sack would be
5 dumped on.²³ From that belt, bundles and loose pieces would receive further
6 processing which should be exactly the same whether they were dumped from a sack
7 or a tub, with the possible exception that using a sack might increase the possibility of
8 bundle breakage. Similarly, the SCF tub would be dumped on the same belt as an SCF
9 sack would be dumped on, and the service from there on should be exactly the same.
10 Going back to the Cameron Observer, which currently does not have an agreement to
11 use tubs, it would appear that putting the copies to the St. Joseph area in one or a few
12 SCF sacks should allow just as good service as entering them in the large number of
13 small 5-digit and 3-digit sacks that Crews reports are being used for this mail today.

14 Second, the Postal Service these days does a reasonably good job of sorting flats and
15 is improving its bundle handling capability. Sorting sacks is, at least outside of the
16 BMC's, a slower, costlier and more damage prone process. It therefore makes more
17 sense for a very small volume of flats and flats bundles, such as the non-local copies of
18 the Cameron Observer or Atchinson County Mail, that these volumes be entered with
19 mixed ADC presort at the originating plant and be allowed to travel from there on as
20 bundles or loose flats. That is how First Class flats travel through the system, and there
21 seem to be relatively few complaints about their service.

22 Use of flat tubs instead of sacks for such small mail volumes appears to make sense, at
23 least when agreeable to management in the originating post office, and it might make
24 sense for the Postal Service to codify such a methodology in its mail preparation
25 regulations. Dumping flats from a flats tub probably costs a lot less than dumping them

²² Response to TW et al./NNA-T2-7 (filed September 30, 2004).

²³ Response to TW et al./USPS-2 (filed September 28, 2004).

1 from a sack.²⁴

2 Newspapers of this size can probably not be considered candidates for co-mailing or
3 co-palletization. Getting their mail out of sacks, or at least using fewer sacks, is unlikely
4 to be accomplished by the types of “small carrot and no stick” approach that the Postal
5 Service seems to favor. On the other hand, imposing a cost based per-sack charge
6 would reduce the number of sacks very quickly.

7 **V. DOES USE OF “SKIN SACKS” PRODUCE FASTER DELIVERY?**

8 As the above examples make abundantly clear, except for the zoned editorial pound
9 rate component of the proposed rates, the question of how those rates would affect a
10 small or medium sized mailer is mostly a question of whether that mailer uses a lot of
11 skin sacks. To a lesser extent it is also a question of mail piece machinability. A mailer
12 with too little volume to palletize on his own, who lacks access to co-mailing, co-
13 palletization or pool shipping services, can still do fairly well (at most a single digit
14 increase and in many cases reduced postage) under the proposed rates if he simply
15 avoids the use of low-volume sacks and uses a machinable mail piece format.

16 That still leaves open the question of whether use of low-volume sacks really does lead
17 to faster delivery, as many people evidently believe, even without any compelling
18 evidence that it is true. While I obviously don’t know the full answer to this question, I
19 hope the following discussion will at least shed some light on the issue.

20 One thing that is known is that Periodicals that are entered far from the destination
21 office occasionally incur very long delays, sometimes several weeks. As I indicated in
22 response to an interrogatory following my direct testimony, I myself have experienced
23 this on several occasions. Response to MH/TW et al.-T2-3: Tr. 1/134-35.

²⁴ A sack must first be untied, then grabbed in its two lower corners and shaken until it is absolutely certain that no leftover piece remains lodged inside the sack. Then it must be straightened and recycled for future use by another mailer. A tub, on the other hand, can be emptied in a single motion and in most cases be put to other immediate use in the same facility.

1 It is also known that mailers as well as recipients of Periodicals often complain about
2 service delays and that some postal managers, rather than address the underlying
3 problems in postal operations that cause the delays, advise mailers to put their mail
4 pieces in low-volume, high-presort sacks. The inevitable result of giving such advice to
5 many mailers is to cause more work for postal facilities, which can only increase the
6 chances of even more service delays as well as higher Periodicals costs.

7 It should be obvious that the occasional very long service delays (e.g., weeks rather
8 than one or two days), have nothing to do with the presort level of the container the mail
9 is entered in. Such delays result from a breakdown in postal operations, e.g., mail
10 getting stuck in a corner and not being moved for a long time. They can only be
11 avoided by the Postal Service tightening up its operations, assuring that facilities
12 observe critical dispatch times, sort mail in the order in which it arrives so that no mail is
13 delayed for long periods and give the prescribed priorities to different mail classes.

14 That however, does not preclude the possibility that the container presort level could
15 make a one day or maybe even two days difference in time to delivery. To address that
16 possibility, let us focus on the case of a small mailer who enters his mail at the origin
17 office for delivery at a remote location and who does not have the option of co-mailing
18 or co-palletization, yet tries to prepare his mail so as to maximize its chances of being
19 delivered as soon as possible. This mail will travel through the system first in sacks,
20 then in bundles and eventually as single pieces. The presort level of the sack
21 determines how far into the system the mail will stay in the sack before it hits the Postal
22 Service's more efficient bundle and piece sorting operations. Let us break down the
23 problem further by considering three types of choices this mailer might have to make:
24 (1) whether to split a 3-digit/SCF sack into smaller 5-digit sacks; (2) whether to split an
25 ADC sack into smaller 3-digit/SCF sacks; and (3) whether to split a mixed ADC sack
26 into smaller ADC sacks.

27 5-Digit Versus 3-Digit/SCF Sacks. As I pointed out in my response to
28 MH/TW et al.-T2-3, the 5-digit and 3-digit sacks will be handled the same way
29 and travel the same path until they arrive at the destinating SCF. The 5-digit
30 sacks will at that point have incurred higher costs because there are more of

1 them, but from the service point of view all we need to consider is what happens
2 once they get to the SCF. Witness McGarvy refers to a recent Postal Service
3 experiment (at the Carol Stream processing plant) where it appeared that the
4 mail in the 3-digit sacks in fact got delivered earlier. She dismisses the
5 experiment as having used a too small sample, but admits that she cannot fully
6 explain her concern that the mail in 3-digit sacks might take longer. ABM-T-3 at
7 7 and response to TW et al./ABM-T3-15 (filed October 14, 2004).

8 While the Carol Stream experiment may have used a small sample, I believe its
9 conclusions are perfectly logical and could have been expected. The notion that
10 the 5-digit sack should give faster delivery is based on the assumption that at the
11 DSCF platform it will be sent directly on the next truck to the DDU, while the 3-
12 digit sack goes inside the building to a bundle sorting operation where
13 conceivably a delay might occur, causing it to miss dispatch to the DDU. But in
14 reality, postal facilities nowadays are moving more and more of their incoming
15 secondary (5-digit to carrier route) flat sorting away from the DDU's to the
16 processing plants, in order to take advantage of their automated flats sorting
17 capacity. In an environment with declining volumes, where many plants already
18 have more AFSM-100 processing capacity than they are able to use, this trend
19 must be expected to continue. So unless the 5-digit sack contains carrier route
20 bundles, its contents may often be sent from the DDU back to the plant for
21 automated sorting. By the time it gets back to the plant, however, the mail that
22 was in the 3-digit sack may already have been sorted to carrier route and
23 dispatched to the DDU. This makes it possible and in some cases even likely
24 that the mail in the 5-digit sack will be delivered one day later.

25 The only case then, where non-carrier route mail in 5-digit sacks might be
26 delivered faster is if it is destined to a 5-digit zone for which incoming secondary
27 sorting still is performed manually at the DDU. This is most likely to occur for
28 outlying 5-digit Zip codes with low volume. And even in these cases it will occur
29 only if the plant fails to meet its own service standards, e.g., by not finishing the
30 bundle sorting before the critical dispatch to the given DDU.

31 3digit/SCF Versus ADC Sacks. In this case I believe there may be examples
32 where under the present Postal Service sorting scheme the mail in the 3-
33 digit/SCF sacks could get faster delivery to some addresses. The sacks may

1 pass through a BMC/transfer hub where the Postal Service sorts sacks but
2 normally not Periodicals bundles. When a Periodicals ADC sack (or pallet)
3 comes to the BMC/transfer hub it is sent on to the ADC where it is opened and
4 its bundles sorted. Some of those bundles may be to other SCF's served by the
5 ADC. If those bundles were in 3-digit/SCF sacks they would have gone directly
6 from the BMC/transfer hub to the destinating SCF, bypassing the ADC, which
7 could give a one-day delivery advantage in some cases. However, this is likely
8 to occur only for sacks going to a small SCF that is not an ADC. ADC's are large
9 SCF's that serve smaller surrounding SCF's. Most of the mail in an ADC sack
10 may be to the ADC's own service area and for that mail there is unlikely to be
11 any service advantage in using 3-digit rather than ADC sacks.

12 ADC Versus Mixed ADC Sacks. Finally, assume that a small mailer has a few
13 ADC bundles and must choose between making a separate ADC sack for each
14 bundle or combining them into a larger mixed ADC sack. It is hard to see how
15 there could be any service advantage of using the smaller sacks in this case. If
16 one mixed ADC sack is used, it will immediately be dumped at a belt in the
17 originating facility where the bundles are sorted and dispatched to each ADC. If
18 several ADC sacks are used, they must be sorted, most likely manually, at the
19 originating facility. Since there are over 90 ADC's, this sorting may require more
20 than one iteration with probabilities of delay at least as large as for the bundles
21 from the mixed ADC sack. When they get to the DADC, the bundles that were
22 sorted at the originating facility will go directly to the bundle sorting operation at
23 the DADC, while the bundles that are still in ADC sacks must wait for those
24 sacks to be sorted.

25 Mailers engage in the practice of using many small sacks because under current rates it
26 is free, and because they think it might reduce time to delivery. But as discussed
27 above, except possibly in the case of 3-digit versus ADC sacks, there is no real reason
28 to believe this practice will help delivery. The only empirical "study" that anyone has
29 been able refer to, the Carol Stream study, points in the opposite direction.

30 Once the use of "skin sacks" is no longer free, as with implementation of the types of
31 rates proposed in this case, I would expect their use to drop dramatically, which should
32 lead to lower Periodicals costs.

1 **VI. MISCELLANEOUS ISSUES**

2 Opponents have come up with many reasons for postponing indefinitely any serious
3 reform of the Periodicals rate structure that would make the rates more cost based.
4 This section addresses some of those objections.

5 1. There Is No Need To Wait For Future Changes In Technology.

6 Bradfield refers to changes that the Postal Service may make at some time in the future
7 and considers them good enough reason for doing nothing right now. In particular, he
8 refers to the possibility that the Postal Service may try to automate the carrier
9 sequencing of flats, using either the FSS (flats sequencing system) or DPP (delivery
10 point packaging) concept. He argues that:

11 What all of this means is that the pattern of cost incurrence is likely to undergo
12 significant change in the next few years, and I think it would be a mistake to
13 restructure rates without consideration of those changes.

14 ABM-T-2 at 11.

15 The Postal Service has been working on plans for new technology deployment since at
16 least 1970. I doubt if there has been any time since then that one could not have made
17 the same type of argument for making no change until some future event happens.
18 The possibility that the Postal Service may at some point deploy either FSS or DPP is
19 particularly irrelevant to the Complainants' proposal in this case²⁵. Both concepts deal
20 exclusively with what happens to the flats after they have arrived at the destinating SCF
21 and been sorted to the 5-digit ZIP code level. The present proposal, on the other hand,
22 deals primarily with what happens before the DSCF. No matter how flats are eventually
23 sequenced for delivery, they still need to get to the DSCF as rapidly and inexpensively
24 as possible. Implementation of FSS or DPP may affect the value of carrier route

²⁵ Note that FSS and DPP are two very different concepts. Neither of them has been proven feasible in practice yet, and the Postal Service is keeping both options open. One thing that is certain is that under both FSS and DPP the effect of non-machinability will be much more serious than it is today.

1 presorting, but that is not what the present case is about.²⁶

2 2. The Large Increases In Periodicals Costs Over Many Years Make Fundamental
3 Change In The Rate Structure More Important, Not Less.

4 Applying the same convoluted logic that seemed to underlie an ABM interrogatory to
5 me (see ABM/TW et al.-T2-2 and my response to it, Tr. 1/76-77), Cavnar suggests that
6 further changes in the way Periodicals mailers prepare and enter their mail will be
7 useless:

8 if the significant changes made by all segments of the Periodicals industry in the
9 past twenty years did not have the expected effect of “driving costs out of the
10 system,” why should we believe that similar changes in the next few years will
11 have that effect?

12 ABM-T-1 at 23.

13 The truth is, of course, that were it not for the very substantial changes that have been
14 made by many Periodicals mailers, Periodicals costs would be much higher than they
15 are today, and all mailers would be paying substantially higher rates. Furthermore, as
16 shown in the preceding sections, there are at least some segments of the industry
17 (those whose postage would increase the most under the proposed rates) that can
18 make some more changes (e.g., use fuller sacks if palletization is not an available
19 alternative) and likely will make such changes if the proposed rates are implemented.
20 For a description of many more changes that can and likely will be made, by large and
21 small mailers, see the rebuttal testimony of witness O’Brien (TW et al. RT-1).

22 It is true that I have argued in the past (and may argue again, depending on what is
23 presented in the next rate case) that in an increasingly automated environment where
24 more and more costs are “fixed” and more and more employee time is spent “not
25 handling” mail, an excessive portion of those fixed and not handling costs tends, under

²⁶ Bradfield also mentions Postal Service claims that it has reduced its transportation costs and plans to deploy APPS machines for bundle sorting as reasons for doing nothing. ABM-T-2 at 10-11. Neither reason is valid. If, for example, unit transportation costs really have declined, that will automatically be reflected in lower zone rate differentials in the rates that results from the next rate case, regardless of whether those rates incorporate the features recommended by Complainants in this docket.

1 the Postal Service's costing system, to be attributed to the least automated mail, which
2 includes Periodicals. But since those fixed costs are attributed in proportion to "direct"
3 costs, the only dependable way for Periodicals to avoid ever higher cost attribution is to
4 minimize the direct costs they impose on the Postal Service. One way to do that is to
5 not make the Postal Service handle more sacks than is really necessary, i.e., by
6 avoiding excessive use of "skin sacks."

7 3. The Proposed Rate Structure Is Not "Unmanageably Complex," But Will Encourage
8 Creative Solutions By Mailers And Software Developers.

9 Witness Schaefer (MH-T-1) expresses great concern about "unmanageably complex"
10 price signals that will overwhelm most Periodicals mailers. He describes in
11 considerable detail the difficulty of "optimizing" the mailstream under these new signals
12 and laments that there is no suitable software available, that mail.dat files do not
13 contain all the information needed, etc.

14 Like so many opponents, Schaefer sees only the difficulties and not the tremendous
15 opportunities that cost based price signals will open up. The current rates send no
16 price signals to mailers that, for example, using a large number of low-volume sacks will
17 cost the Postal Service a lot of money.²⁷ What the proposed rates will do is to inform
18 mailers what their mail costs as it currently is being prepared. That will mobilize the
19 ingenuity of small and large mailers as well as professional software developers to find
20 ways to prepare a mailing so as to minimize the combined cost to the mailer and the
21 Postal Service.

22 I think perhaps Mr. Schaefer reads too much into the term "optimize." To optimize, in
23 the strictest mathematical sense, all the preparation parameters for a Periodicals
24 mailing is indeed a very complex task. On the other hand, it is not really necessary, as
25 long as one can find a reasonably good solution. I worked for many years with various

²⁷ Or at best the signals are muddled. For example, there are some per-piece signals to entice mailers into putting mail on pallets. But most of the underlying savings lie in reducing the number of sacks, and current rates fail to inform mailers who cannot palletize for whatever reason that it would help a lot if they would simply use fewer sacks and fill them up more, which would probably reduce the mailers' preparation costs as well.

1 models for mathematical optimization applied to many different situations. One thing I
2 learned is that in most real life situations the “optimum” is elusive because it may shift
3 as soon as any parameter changes and because it may be very difficult to compute
4 without a very fast computer. On the other hand, there are many things one can do to
5 change a bad solution into a better solution.

6 For example, as shown in earlier sections and discussed in O’Brien’s testimony, many
7 mailers who, if the proposed rates were implemented tomorrow, would face very large
8 increases could start by simply changing the sack minimums they use so as to avoid
9 the creation of a large number of skin sacks. In many cases that might be enough to
10 eliminate a potentially large increase.

11 But sack minimums are only one of many things that a mailer might change. Take for
12 example the question of how many pieces there must be for a given area (carrier route,
13 5-d zone, 3-d zone, etc.) in order to make up a presorted bundle to that area. Today,
14 there is little flexibility and everything is pretty much defined by the six-piece rule; when
15 there are six or more pieces to a 5-d zone, for example, then a 5-d bundle must be
16 made, but if there are only five pieces, then such a bundle may not be made. Should
17 the six piece bundle minimum be changed to something else? The answer is that it
18 depends. If, for example, the pieces are non-machinable, smaller bundles may be
19 warranted because the sorting operations that the pieces bypass by being bundled are
20 more expensive. Similarly, if a 5-digit bundle that potentially could be split off from a 3-
21 digit bundle is going to be entered on an ADC pallet it may cost more and be less
22 desirable than if it is going to be entered on a 3-digit pallet.²⁸ There will be numerous
23 trade-offs like that, each of which presents an opportunity to do things more efficiently
24 than today and each of which can be calculated based on the given rates (unit costs)

²⁸ Schaefer’s comment that mail.dat files cannot be used “to vary the number of copies in a bundle” (MH-T-1 at 24) is true, but it is also irrelevant. All it means is that if one wants to play with (try to optimize) the number of pieces in various types of bundles, the proper place to do so is in the fulfillment program that operates on the list of addresses to which copies are to be mailed.

1 for pieces, bundles and containers at different presort levels.²⁹

2 By 2006, when cost based rates of the type proposed could go into effect, one hopes
3 developers of Periodicals fulfillment software will have had time to modify their
4 programs to take maximum advantage of the new opportunities. But if not, existing
5 software may already give reasonably good results by proper setting of user defined
6 parameter such as sack minimums.

7 **VII. CONCLUSIONS**

8 Opponents have come up with many reasons for postponing more-or-less indefinitely
9 any serious reform of the Periodicals rate structure that would make the rates more cost
10 based. They argue, for example, that Periodicals costs are not growing as sharply as
11 they once did, that the Postal Service is planning other cost reduction moves, that the
12 Postal Service's own tinkering with the rate structure (as in the recent co-palletization
13 cases) already is getting some flats out of sacks, that the proposed rates still are not
14 100% cost based because there are some cost drivers that remain unrecognized, that
15 the Postal Service might introduce some new technology (e.g., FSS/DPP) in the future
16 and that nothing should be done until that future has arrived, that using the proposed
17 rate structure will be too difficult for small mailers, that it is too soon for such a radical
18 change, etc.³⁰

19 But most of all, opponents have predicted dire consequences for smaller publications

²⁹ Schaefer misquotes my comments to McGraw-Hill counsel. When asked about some specific trade-off involving whether to use more or fewer sacks, I commented that it requires no more than high school math to figure out how many bundles one should have before it is worthwhile making up an extra sack or pallet. Tr. 1/280. He quotes me as saying anyone with high school math could optimize a mailstream under the proposed rates. The latter is obviously more of a challenge, because it would involve development of a computer program that identifies numerous different interrelated trade-offs and solves all of them. But I believe there are developers of fulfillment software that have such capabilities.

³⁰ Opponents, particularly witness Miller (USPS-T-1), have also argued that the cost data I relied on in my testimony to develop the unit costs needed in Mitchell's rate design are too old, a fact that was readily acknowledged in my testimony, in the TW et al. Complaint and by the Commission itself when it declared at the outset that no specific rates would be recommended at the end of this docket.

1 whose postage, they say, will increase by some enormous percentage. They further
2 argue that these small publications will be left defenseless, unable because of their size
3 to adapt to the new rate structure and therefore doomed to pay much higher rates or
4 even to disappear.

5 It is the opponents' predictions of gloom that are the main focus of my present rebuttal.
6 To address them, I set out to analyze the various groups of small publications for which
7 sufficiently detailed information was available to me. My goal was to try to answer the
8 question that Tang, the ABM witnesses and others did not address, namely, why it is
9 that some small publications in fact would do quite well under the proposed rates while
10 others might have increases approaching 90%.

11 After I began to analyze data provided by ABM and by Tang, it quickly became clear
12 that the answer to my inquiry was simpler than at first anticipated – it really is mostly
13 about the use of “skin sacks”. Each data source indicated that the practice of using
14 skin sacks extends far beyond the weekly and daily publications who might argue that
15 they do it for the perceived service benefit. The same practice is used by publications
16 with as few as four issues per year. The proposed rates would in most cases put an
17 end to that practice and thereby reduce Periodicals costs substantially.

18 Another important characteristic of a publication that would affect its postage under the
19 proposed rates is mail piece machinability. Current rates do not consider machinability
20 even though it affects costs, especially for flats that are entered with low levels of
21 presort and therefore require several iterations of piece sorting. Some publications may
22 be able to change their mail piece format to achieve machinability. Others may be
23 unable to do so or may have reasons for not wanting to. In any case I believe it is fair
24 and reasonable that the extra costs of handling odd size pieces should be borne by
25 those who put them in the mailstream.³¹

³¹ However, as I pointed out in the introduction, the definition of machinability must be realistic in terms of what types of flats can be and are being sorted on the AFSM-100 machines, and that would probably include expanding the current 20 ounce weight limit specified in the DMM, for flats that meet all other machinability criteria.

1 If cost based rates of the type proposed here are put into effect, they will lead to more
2 efficient use of postal resources, because mailers will be confronted with the fact that
3 each bundle, sack and pallet costs something, just as the use of a non-machinable mail
4 piece format costs something. It is true that the need to modify inefficient practices may
5 be felt most strongly by the mail that spends the most time in the postal system, which
6 generally consists of smaller publications. I do not agree, however, that this is a matter
7 of punishing small publications. As I hope to have demonstrated above, most small
8 publications should be able to adjust fairly quickly to a point where their postage is not
9 significantly higher than today, and in some cases it will be lower.

10 I have also attempted to address the issue of Periodicals service, which at times leaves
11 much to be desired except for publications that are entered very close to their final
12 destination. The use of "skin sacks" appears to be motivated in some cases by the
13 perception that it will somehow produce faster delivery, a perception that far too often is
14 encouraged by postal managers who can think of no other way to address legitimate
15 complaints about poor service. It is rather remarkable that even though it has existed
16 for many years, no one can refer to any study, whether by the Postal Service or mailers,
17 that can determine whether this perception has anything to do with reality, except one
18 small recent Postal Service study that indicates it is not true. Logic would seem to
19 indicate that in a fully rational and well organized system the mail preparation method
20 that requires the least amount of work for the Postal Service should also lead to the
21 fastest delivery. In a preceding section I have tried to identify, based on my
22 understanding of current processing methods, the instances where use of "skin sacks"
23 might improve the chances of faster delivery and the instances where it is unlikely to do
24 so.

25 For all of the reasons given above, I hope that the Commission will strongly recommend
26 that the Postal Service present in the next rate case a set of cost based Periodicals
27 rates, based on the most recent cost data and the general principles developed in this
28 docket.

Table A-1: Impact of Proposed Rates On Small, Low Density Publications With and Without Zoned Editorial Rates								
Publication No.	Editorial Content	Pounds per piece	Issues/ Year	Machin able?	Bundles per sack	Pieces per sack	Percent Postage Change	
							With Zoned Edit Rates	With Flat Edit Rates
244	100%	0.24	12	M	1.00	10.00	89.96%	81.18%
152	65%	0.28	52	M	1.00	12.61	67.18%	62.93%
163	75%	0.27	50	M	1.20	15.27	47.98%	48.38%
232	100%	0.56	24	M	1.00	10.94	59.02%	46.58%
251	72%	0.08	52	M	1.09	14.55	46.11%	46.22%
242	71%	0.37	12	M	1.00	12.85	48.70%	42.98%
249	55%	1.02	365	NM	1.80	11.70	36.61%	38.94%
227	58%	0.33	365	M	1.00	11.44	32.78%	32.94%
169	69%	0.18	307	M	1.04	16.35	32.01%	32.65%
246	100%	1.99	24	NM	1.00	10.42	48.89%	21.02%
160	98%	0.46	52	M	1.87	27.93	11.99%	16.12%
243	54%	0.23	365	M	1.00	16.89	14.76%	14.73%
217	80%	0.17	53	NM	7.71	98.59	13.83%	11.68%
228	80%	0.19	12	M	3.90	48.94	17.33%	7.32%
173	100%	0.11	6	M	3.53	43.47	12.00%	6.54%
230	28%	0.12	4	M	3.34	41.24	6.70%	6.03%
234	100%	0.46	4	M	4.27	35.09	11.43%	4.63%
229	99%	1.25	16	NM	3.00	33.05	30.01%	3.99%
248	66%	0.27	13	M	3.12	45.53	8.52%	2.38%
158	97%	0.39	52	M	2.86	49.36	21.00%	1.97%
170	100%	0.36	4	M	2.33	40.97	29.55%	1.58%
174	59%	0.20	12	M	5.44	51.83	3.52%	1.55%
220	34%	0.29	12	M	3.27	46.50	3.25%	1.37%
218	87%	0.46	6	M	3.10	40.40	14.25%	1.36%
224	100%	0.23	6	M	3.94	47.11	7.94%	1.10%
226	77%	0.45	6	M	2.95	38.96	9.54%	0.53%
231	66%	0.22	12	M	4.22	48.10	4.44%	0.47%
245	46%	0.39	10	M	3.40	45.54	4.19%	0.32%
239	50%	0.65	12	M	3.07	34.20	4.72%	0.29%
153	97%	0.11	26	M	4.64	64.24	0.55%	-0.08%
247	100%	0.66	12	M	2.87	38.54	15.76%	-0.60%
151	40%	0.53	13	M	2.98	41.77	2.04%	-0.98%
241	63%	0.56	12	M	2.81	39.35	9.03%	-1.27%
225	84%	0.59	6	M	2.79	38.88	7.70%	-1.77%
171	100%	2.64	52	NM	1.77	16.18	28.86%	-1.94%
175	100%	0.20	12	M	1.00	35.50	1.27%	-2.10%
172	86%	1.22	12	M	2.72	27.61	12.53%	-2.54%
214	39%	0.71	6	M	3.58	35.36	3.76%	-2.77%
235	56%	0.49	12	M	4.74	61.03	1.30%	-4.79%
216	99%	0.95	52	M	4.19	38.54	-3.15%	-4.99%
250	67%	0.33	12	M	5.53	61.47	-3.19%	-6.44%
223	40%	1.73	12	M	3.90	32.50	1.13%	-8.22%
237	95%	0.15	26	M	3.41	48.50	-6.35%	-8.77%
236	43%	0.63	24	M	2.63	39.31	-9.84%	-9.41%
215	92%	0.63	22	M	2.00	29.20	-2.06%	-9.41%
240	47%	0.35	365	M	3.14	41.71	-9.15%	-9.58%
233	70%	0.13	48	M	3.00	62.83	-10.89%	-12.11%
219	76%	0.13	22	M	5.20	71.60	-12.62%	-14.56%
222	44%	0.08	50	M	5.00	88.00	-15.64%	-15.64%
221	75%	0.12	23	M	11.67	143.33	-15.87%	-17.46%
238	83%	0.11	22	M	17.33	193.00	-14.62%	-17.47%

**Table A-2: Impact of Proposed Rates On Small, High Density Publications
With and Without Zoned Editorial Rates**

Publication ID	Editorial Content	Pounds per piece	Issues/Year	Machinable?	Bundles per sack	Pieces per sack	Percent Postage Change	
							With Zoned Edit Rates	With Flat Edit Rates
154	68%	0.16	309	M	0.89	10.18	80.00%	80.54%
213	64%	0.37	313	M	1.11	9.45	75.71%	79.16%
189	43%	0.38	12	M	1.00	11.47	62.71%	61.69%
155	47%	0.19	260	NM	2.13	21.28	50.80%	52.35%
191	81%	0.16	24	M	1.00	16.53	48.78%	50.10%
197	100%	0.64	24	M	1.00	12.18	52.11%	48.78%
179	65%	0.26	53	NM	1.00	12.22	45.94%	48.42%
211	72%	0.98	12	M	1.00	9.28	48.08%	45.77%
156	60%	0.46	365	NM	1.25	17.33	37.29%	42.46%
157	71%	0.41	255	NM	1.00	14.04	32.64%	39.92%
196	100%	0.57	12	M	1.00	15.11	85.77%	38.78%
188	82%	0.26	52	NM	1.00	14.02	31.09%	36.66%
203	100%	0.91	24	M	1.00	12.86	55.45%	32.99%
192	100%	0.25	54	NM	1.87	24.15	26.52%	27.93%
194	100%	1.55	24	NM	1.00	11.76	19.87%	27.07%
184	26%	0.35	52	M	1.00	15.61	24.53%	25.28%
202	26%	1.14	12	M	1.00	12.36	24.65%	21.20%
208	50%	0.15	52	M	3.32	39.57	14.19%	15.30%
159	41%	0.28	52	M	1.31	35.09	12.51%	14.30%
162	75%	0.15	52	M	3.30	49.04	8.98%	11.95%
207	71%	0.27	52	M	4.17	36.50	6.96%	10.39%
212	100%	2.64	24	NM	1.58	12.71	34.07%	9.45%
164	26%	1.90	308	NM	2.17	9.42	4.10%	9.04%
195	61%	0.10	52	M	3.08	47.73	7.15%	8.72%
209	100%	0.46	52	M	1.99	31.03	0.22%	8.65%
198	70%	0.26	11	M	4.09	42.86	10.89%	7.87%
190	28%	0.13	17	M	2.63	35.76	6.92%	7.70%
200	63%	0.28	53	NM	2.15	36.63	3.48%	7.27%
206	100%	0.08	26	M	2.47	55.24	4.30%	6.25%
161	100%	0.07	12	M	4.17	50.85	9.35%	6.04%
178	79%	0.24	6	M	3.75	47.65	12.50%	5.56%
176	44%	0.20	52	NM	2.86	39.56	-0.36%	2.73%
193	66%	0.53	10	M	3.21	39.83	10.81%	2.30%
183	83%	1.87	12	NM	1.95	24.14	16.12%	1.99%
166	90%	0.06	52	M	2.97	52.56	-1.38%	1.19%
168	33%	1.20	365	NM	1.24	25.23	-5.46%	0.03%
205	100%	0.18	36	M	4.01	60.21	-1.31%	0.01%
204	100%	0.52	12	M	3.42	59.75	10.23%	-0.26%
201	100%	0.32	251	M	4.32	54.14	-4.01%	-0.75%
180	94%	0.25	4	M	2.79	48.30	-7.00%	-1.50%
165	35%	0.13	12	M	4.43	55.00	-3.18%	-2.35%
185	100%	0.55	24	M	3.82	44.35	8.23%	-2.54%
167	42%	0.48	52	M	2.84	40.32	-4.26%	-2.63%
199	99%	0.67	52	M	2.93	49.41	12.67%	-2.93%
182	99%	0.77	52	M	2.88	46.78	-1.26%	-3.75%
186	42%	0.30	27	M	3.39	47.56	-8.98%	-4.99%
187	100%	0.06	26	M	10.71	132.42	-7.76%	-5.83%
210	76%	0.31	24	M	2.95	49.44	-13.46%	-7.78%
181	59%	0.20	12	M	3.44	47.83	-10.40%	-8.57%
177	100%	0.10	12	M	1.00	80.52	-12.19%	-9.96%

Table B1: Additional data on entries 116 through 144 in Bradfield’s Exhibit LB-1

Publi c ation	Weight (lbs)	AD %	# of pieces	# of bundles	# of pallets	# of sacks	Avg. pcs per bundle	Pallet ized pieces	% pallet ized	Avg. pcs per pallet	Sacked pieces	% sacked	Avg. pcs per sack	Avg. wgt per sack	Sack mini mum	Current Postage	New Postage	% increase
116	0.21	43.04%	18,060	2,101	1	331	9	1598	8.85%	1598	16462	91.15%	50	10.4	24	\$5,022	\$5,629	12.09%
117	0.23	35.83%	35,723	3,527	4	458	10	5805	16.25%	1451	29918	83.75%	65	15.0	24	\$9,601	\$10,428	8.61%
118	0.22	50.40%	24,229	2,469	0	407	10	0	0.00%	0	24229	100.00%	60	13.1	24	\$7,228	\$7,754	7.28%
119	0.66	46.16%	29,405	4,242	20	1552	7	8507	28.93%	425	20898	71.07%	13	8.9	6	\$12,121	\$16,723	37.97%
120	0.18	51.00%	36,064	4,427	0	678	8	0	0.00%	0	36064	100.00%	53	9.6	24	\$10,340	\$11,347	9.74%
121	0.19	46.20%	29,540	3,331	0	2272	9	0	0.00%	0	29540	100.00%	13	2.5	6	\$7,799	\$14,115	80.98%
122	0.72	59.56%	102,771	13,106	130	250	8	91363	88.90%	703	11408	11.10%	46	32.9	24	\$45,794	\$47,840	4.47%
123	0.18	49.00%	22,805	3,155	0	523	7	0	0.00%	0	22805	100.00%	44	7.8	24	\$6,356	\$7,304	14.92%
124	0.48	48.06%	40,808	5,096	25	375	8	20465	50.15%	819	20343	49.85%	54	26.0	24	\$14,859	\$15,728	5.85%
125	0.17	36.94%	12,752	1,407	0	260	9	0	0.00%	0	12752	100.00%	49	8.3	24	\$3,481	\$3,925	12.75%
126	0.39	49.48%	33,774	3,620	11	404	9	9217	27.29%	838	24557	72.71%	61	23.7	24	\$11,397	\$12,073	5.93%
127	0.69	64.05%	52,012	6,045	68	297	9	38530	74.08%	567	13482	25.92%	45	31.3	24	\$22,838	\$23,980	5.00%
128	0.24	50.86%	22,948	2,587	2	1560	9	2483	10.82%	1241	20465	89.18%	13	3.1	6	\$6,614	\$10,918	65.07%
129	0.34	45.82%	32,087	3,869	10	415	8	10223	31.86%	1022	21864	68.14%	53	17.9	24	\$9,863	\$10,611	7.58%
130	0.18	28.13%	36,373	3,649	2	505	10	2910	8.00%	1455	33463	92.00%	66	11.9	24	\$9,032	\$9,917	9.80%
131	0.47	26.80%	29,357	3,466	20	328	8	15536	52.92%	777	13821	47.08%	42	19.8	?	\$8,346	\$8,748	4.82%
135	0.25	55.00%	16,345	1,774	3	215	9	6592	40.33%	2197	9753	59.67%	45	11.3	24	\$4,775	\$5,054	5.84%
136	0.52	67.00%	14,617	1,990	10	351	7	10133	69.32%	1013	4484	30.68%	13	6.6	6	\$5,434	\$6,310	16.12%
137	0.17	58.75%	28,301	3,135	1	433	9	1896	6.70%	1896	26405	93.30%	61	10.4	24	\$7,971	\$8,556	7.34%
138	0.99	41.00%	50,646	9,211	87	415	5	34951	69.01%	402	15695	30.99%	38	37.4	24	\$24,747	\$27,862	12.59%
139	0.38	47.37%	67,545	9,881	20	1065	7	18143	26.86%	907	49402	73.14%	46	17.6	24	\$22,200	\$24,630	10.95%
140	0.23	54.77%	29,942	3,337	3	502	9	3650	12.19%	1217	26292	87.81%	52	12.0	24	\$8,689	\$9,505	9.39%
141	0.44	67.63%	18,569	2,423	10	246	8	7186	38.70%	719	11383	61.30%	46	20.4	24	\$7,188	\$7,609	5.86%
142	0.39	59.00%	18,514	2,851	0	420	6	1559	8.42%	0	16955	91.58%	40	15.7	24	\$6,762	\$7,332	8.43%
143	0.27	52.20%	27,097	2,917	5	387	9	5376	19.84%	1075	21721	80.16%	56	15.2	24	\$8,168	\$8,764	7.30%
144	0.36	58.96%	56,521	6,189	31	1921	9	28933	51.19%	933	27588	48.81%	14	5.2	6	\$18,589	\$23,868	28.40%

Table B2: Additional data on entries 1 through 75 in Bradfield's Exhibit LB-1

Publi catio n	Distri bution	freq	Current Annual Postage	Proposed Annual Postage	% Postag e Differ ence	Approx Circ	3-Dig Count	5-Dig Count	Cr Count	Firm Count	% On pallets	Avg Pcs Per Sack	% Dest Entry	Per Issue Current Postage	Per Issue New Postage	Avg. weight	Sack mini mum
1	National	18	\$564,552	\$624,600	10.64	153,500	18,061	44,571	14,161	8,899	89	35	0.4	\$31,364	\$34,700	0.53	24
2	National	26	\$766,870	\$793,702	3.50	126,000	18,895	54,816	17,237	2,329	77	49	0.3	\$29,495	\$30,527	0.36	24
3	National	12	\$222,900	\$238,176	6.85	83,000	18,861	41,305	8,895	1,281	48	51	0.3	\$18,575	\$19,848	0.23	24
4	National	12	\$76,632	\$85,152	11.12	32,000	7,877	8,766	1,872	662	35	45	0.5	\$6,386	\$7,096	0.36	24
5	National	12	\$83,004	\$89,544	7.88	26,000	10,701	9,040	598	158	12	49	0.5	\$6,917	\$7,462	0.31	24
6	National	11	\$477,026	\$528,077	10.70	131,700	51,268	63,115	204	4,524	76	39	0.5	\$43,366	\$48,007	0.45	24
7	National	12	\$109,092	\$119,952	9.94	44,000	13,051	17,010	1,444	279	22	50	0.3	\$9,091	\$9,996	0.22	24
8	National	12	\$255,912	\$268,632	4.97	77,300	18,794	47,674	4,180	628	61	50	0.4	\$21,326	\$22,386	0.36	24
9	National	12	\$117,972	\$130,272	10.42	46,000	14,435	19,500	2,188	688	14	51	0.4	\$9,831	\$10,856	0.19	24
10	National	12	\$181,764	\$191,928	5.59	77,000	17,950	33,158	2,035	111	18	57	0.5	\$15,147	\$15,994	0.25	24
11	National	12	\$119,364	\$131,292	10.00	64,000	12,942	15,086	106	3,458	3	47	0.3	\$9,947	\$10,941	0.21	24
12	National	12	\$277,908	\$307,416	10.62	92,500	20,072	42,890	12,903	1,561	83	44	0.4	\$23,159	\$25,618	0.30	24
13	National	12	\$232,416	\$243,660	4.84	68,000	16,871	36,650	6,772	500	51	51	0.3	\$19,368	\$20,305	0.37	24
14	National	12	\$274,596	\$292,020	6.35	99,000	19,687	50,993	17,993	1,227	73	50	0.5	\$22,883	\$24,335	0.21	24
15	National	12	\$147,756	\$157,464	6.57	42,000	15,717	19,352	1,995	421	37	49	0.5	\$12,313	\$13,122	0.34	24
16	National	21	\$1,015,245	\$1,026,522	1.11	157,500	20,822	102,611	28,073	611	89	49	0.5	\$48,345	\$48,882	0.43	24
17	National	12	\$150,132	\$160,488	6.90	48,000	15,850	25,080	270	434	6	53	0.5	\$12,511	\$13,374	0.31	24
18	National	12	\$88,944	\$96,504	8.50	21,000	14,940	3,690	0	172	0	43	0.5	\$7,412	\$8,042	0.33	24
19	National	11	\$178,156	\$185,317	4.02	54,000	15,279	26,303	4,282	813	30	40	0.3	\$16,196	\$16,847	0.38	24
20	National	11	\$99,341	\$111,177	11.91	38,000	7,714	15,470	2,456	907	21	40	0.4	\$9,031	\$10,107	0.38	24
21	National	12	\$106,068	\$117,144	10.40	36,500	13,713	12,612	539	632	3	46	0.2	\$8,839	\$9,762	0.24	24
22	National	20	\$474,180	\$494,460	4.27	96,500	19,681	50,681	15,492	1,108	61	50	0.4	\$23,709	\$24,723	0.28	24
23	National	6	\$221,922	\$226,956	2.27	152,000	20,740	102,339	24,568	380	80	52	0.5	\$36,987	\$37,826	0.24	24
24	National	12	\$284,172	\$294,768	3.73	76,000	29,418	42,368	1,582	253	71	56	0.5	\$23,681	\$24,564	0.34	24
25	National	12	\$256,596	\$268,572	4.67	87,000	19,336	42,631	8,983	1,459	58	50	0.4	\$21,383	\$22,381	0.30	24
26	National	12	\$241,368	\$257,352	6.62	100,000	17,414	38,031	14,633	3,030	75	47	0.5	\$20,114	\$21,446	0.27	24
27	National	12	\$199,464	\$218,232	9.41	82,000	17,791	40,335	8,318	1,217	46	48	0.3	\$16,622	\$18,186	0.22	24
28	National	12	\$98,532	\$110,892	12.55	42,000	11,458	13,743	664	1,414	10	46	0.4	\$8,211	\$9,241	0.29	24
29	National	12	\$264,996	\$284,040	7.19	76,000	29,887	34,875	1,844	406	26	48	0.5	\$22,083	\$23,670	0.31	24

30	National	12	\$291,744	\$310,548	6.45	101,000	21,624	51,043	19,837	1,784	80	49	0.4	\$24,312	\$25,879	0.20	24
31	National	12	\$121,380	\$132,840	9.44	38,000	11,794	21,056	1,156	393	13	48	0.4	\$10,115	\$11,070	0.26	24
32	National	12	\$372,492	\$390,156	4.74	163,000	23,546	60,376	18,987	7,184	70	45	0.3	\$31,041	\$32,513	0.25	24
33	National	12	\$234,912	\$255,156	8.62	91,700	18,777	47,642	8,381	1,697	34	50	0.4	\$19,576	\$21,263	0.16	24
34	National	12	\$255,048	\$270,600	6.09	96,600	19,479	41,204	11,308	2,150	66	48	0.4	\$21,254	\$22,550	0.28	24
35	National	26	\$157,742	\$162,422	2.96	22,000	9,701	8,259	0	223	0	48	8.4	\$6,067	\$6,247	0.39	24
36	National	12	\$187,584	\$197,796	5.45	63,700	15,369	25,522	5,957	1,258	38	48	0.4	\$15,632	\$16,483	0.35	24
37	National	12	\$256,200	\$274,308	7.07	98,000	18,618	47,985	16,762	1,677	68	49	0.4	\$21,350	\$22,859	0.27	24
38	National	11	\$41,558	\$45,188	8.72	10,600	7,974	1,569	0	20	0	41	0.1	\$3,778	\$4,108	0.36	24
39	National	11	\$116,391	\$125,081	7.46	43,000	13,550	19,792	1,838	710	19	50	0.4	\$10,581	\$11,371	0.24	24
40	National	12	\$406,092	\$419,856	3.39	102,000	24,545	38,742	11,054	2,689	73	41	0.4	\$33,841	\$34,988	0.69	24
41	National	11	\$227,381	\$236,687	4.09	65,000	21,454	42,214	589	61	71	56	0.5	\$20,671	\$21,517	0.37	24
42	National	12	\$316,824	\$352,224	11.18	174,000	17,702	45,809	25,039	7,425	84	41	0.4	\$26,402	\$29,352	0.27	24
43	National	25	\$151,425	\$160,300	5.86	28,000	11,295	10,057	33	346	0	46	27.2	\$6,057	\$6,412	0.21	24
44	National	12	\$68,892	\$75,816	10.06	21,000	11,007	5,814	45	312	0	46	0.4	\$5,741	\$6,318	0.34	24
45	National	12	\$89,472	\$97,836	9.35	35,000	8,603	11,266	2,343	844	28	44	0.2	\$7,456	\$8,153	0.34	24
46	National	6	\$69,438	\$76,002	9.45	46,000	17,044	25,733	1,906	76	31	54	0.5	\$11,573	\$12,667	0.21	24
47	National	12	\$73,344	\$78,912	7.58	19,700	7,633	6,242	193	272	9	41	0.2	\$6,112	\$6,576	0.57	24
48	National	12	\$130,620	\$140,856	7.83	27,200	12,307	4,732	0	0	36	32	0.8	\$10,885	\$11,738	0.84	
49	National	51	\$212,262	\$222,564	4.87	17,600	8,133	3,154	858	96	0	29	39.3	\$4,162	\$4,364	0.29	20
50	National	266	\$563,388	\$594,244	5.48	7,000	4,455	1,844	0	0	0	38	16.7	\$2,118	\$2,234	0.20	20
51	National	12	\$320,268	\$344,520	7.57	55,000	20,956	20,099	1,329	19	66	30	0.1	\$26,689	\$28,710	1.14	20
52	National	20	\$147,640	\$164,460	11.39	18,000	13,157	2,001	405	132	27	25	0.2	\$7,382	\$8,223	0.67	20
53	National	51	\$228,990	\$242,964	6.11	16,000	9,131	2,210	914	197	0	27	32.9	\$4,490	\$4,764	0.33	20
54	National	51	\$294,168	\$312,018	6.08	26,000	12,165	5,150	0	112	13	29	26.5	\$5,768	\$6,118	0.35	20
55	National	12	\$195,348	\$211,944	8.50	37,000	28,571	3,358	563	0	45	28	0.3	\$16,279	\$17,662	0.77	20
56	National	51	\$26,673	\$27,693	3.89	2,200	869	329	0	0	0	27	47.9	\$523	\$543	0.22	20
57	National	51	\$268,668	\$249,441	(7.16)	17,000	9,556	4,298	112	7	0	36	43.4	\$5,268	\$4,891	0.55	20
58	National	12	\$135,228	\$176,484	30.51	31,300	16,569	7,110	0	0	0	31	0.7	\$11,269	\$14,707	0.73	6
59	Regional	12	\$26,256	\$27,816	5.91	8,300	1,984	5,644	288	0	69	72	0.0	\$2,188	\$2,318	0.21	24
60	Regional	12	\$28,176	\$28,836	2.35	8,700	2,959	5,202	0	1	0	80	0.0	\$2,348	\$2,403	0.22	24
61	Regional	12	\$34,692	\$34,572	(0.35)	10,800	3,696	5,766	98	5	39	145	0.6	\$2,891	\$2,881	0.31	24
62	Regional	12	\$20,412	\$20,772	1.74	6,300	2,288	3,667	0	1	0	71	0.1	\$1,701	\$1,731	0.24	24
63	Regional	12	\$39,540	\$40,500	2.42	11,600	4,899	6,206	49	2	28	78	0.0	\$3,295	\$3,375	0.23	24

64	Regional	12	\$29,088	\$29,856	2.65	8,800	3,075	5,214	26	2	0	79	0.0	\$2,424	\$2,488	0.25	24
65	Regional	12	\$21,960	\$21,264	(3.19)	7,000	2,625	3,748	187	1	78	55	6.0	\$1,830	\$1,772	0.25	24
66	Regional	12	\$39,072	\$41,412	5.97	10,500	2,280	7,562	255	2	69	63	0.0	\$3,256	\$3,451	0.32	24
67	Regional	12	\$33,276	\$35,100	5.48	10,400	2,280	7,525	292	2	89	68	0.0	\$2,773	\$2,925	0.22	24
68	Regional	12	\$24,156	\$24,936	3.23	7,300	1,861	4,608	431	1	34	68	0.1	\$2,013	\$2,078	0.24	24
69	Regional	12	\$23,340	\$25,128	7.65	7,000	1,929	4,607	153	4	86	64	0.0	\$1,945	\$2,094	0.26	24
70	National	12	\$178,980	\$214,800	20.01	40,500	11,325	24,736	2,204	340	77	18	0.3	\$14,915	\$17,900	0.53	12
71	National	12	\$187,116	\$229,704	22.76	49,500	11,891	30,894	2,418	515	78	17	0.3	\$15,593	\$19,142	0.43	12
72	National	12	\$101,412	\$125,400	23.65	21,800	11,356	7,980	457	89	36	19	0.3	\$8,451	\$10,450	0.55	12
73	National	24	\$962,784	\$1,297,608	34.78	160,000	49,933	39,170	4,846	701	29	16	0.0	\$40,116	\$54,067	0.38	12
74	National	24	\$815,592	\$1,134,384	39.09	88,000	49,149	14,260	571	320	21	14	0.3	\$33,983	\$47,266	0.42	12
75	National	24	\$247,656	\$348,888	40.88	39,000	110,088	19,252	4,773	439	14	19	0.3	\$10,319	\$14,537	0.27	12

Table C-1: Impact of Proposed Rates on ABM Publications, With And Without Zoned Editorial Rates

Publication no.	Editorial Content	Pounds per piece	Issues per year	Size (L, M, S)	Machinable ?	Percent on Pallets	Bundles per Sack	Pieces per Sack	% postage change	
									Zoned Edit rates	Flat Edit rates
99	50.00%	0.14	12	M	M	0.00%	1.08	12.45	82.41%	82.05%
134	50.00%	0.20	26	M	M	0.00%	1.12	12.76	69.25%	68.14%
116	50.00%	0.14	52	S	M	0.00%	1.29	14.30	55.02%	56.36%
74	48.50%	0.20	52	S	M	0.00%	1.23	15.29	47.94%	49.52%
153	100.00%	0.57	4	M	M	0.00%	1.18	14.64	67.28%	47.86%
144	50.00%	0.19	26	M	M	0.00%	1.04	16.76	46.94%	46.08%
52	34.10%	0.44	52	M	M	0.00%	1.40	14.69	41.35%	42.48%
89	100.00%	0.44	12	M	M	0.00%	1.13	18.79	61.44%	41.09%
151	50.00%	0.26	26	S	M	0.00%	1.15	15.65	39.31%	40.58%
132	50.29%	0.41	13	M	M	22.64%	1.41	13.66	41.02%	35.69%
107	50.00%	0.45	52	S	M	0.00%	1.63	15.30	30.02%	33.31%
117	45.00%	0.47	12	S	M	0.00%	1.14	15.18	37.23%	32.77%
128	50.00%	0.62	52	S	M	0.00%	1.51	13.70	28.30%	31.56%
9	50.00%	0.73	13	M	NM	20.08%	1.27	14.61	28.23%	30.79%
37	53.00%	0.53	12	M	M	32.20%	1.19	13.66	34.68%	29.09%
90	34.00%	0.82	52	S	M	0.00%	1.25	14.82	25.11%	27.14%
11	34.51%	0.83	47	M	M	0.00%	1.28	16.04	21.07%	23.54%
100	50.00%	0.55	52	M	M	62.46%	1.53	12.22	20.36%	22.71%
4	50.00%	0.40	12	M	M	46.47%	1.16	14.32	27.13%	21.84%
2	35.50%	0.83	52	M	M	0.00%	1.28	16.40	19.83%	21.74%
83	32.02%	1.77	12	M	NM	76.80%	3.36	20.99	21.93%	15.66%
39	56.86%	0.41	52	L	M	67.87%	1.10	13.16	11.50%	14.00%
104	40.00%	0.33	12	M	NM	50.66%	4.31	45.99	15.71%	10.93%
63	44.00%	1.55	12	M	NM	73.28%	1.64	12.74	18.86%	10.78%
80	37.27%	1.65	12	M	NM	85.94%	3.29	22.13	17.44%	9.91%
88	30.60%	0.29	18	M	NM	73.15%	4.21	55.02	9.95%	9.85%
59	42.00%	1.37	12	M	NM	69.95%	1.71	14.06	17.34%	9.82%
112	38.00%	0.41	13	M	NM	24.99%	4.25	43.53	12.46%	9.72%
78	35.15%	0.41	12	M	NM	41.24%	4.04	47.44	10.69%	9.65%
147	38.00%	0.86	29	M	NM	44.78%	3.69	37.39	7.59%	9.22%
73	34.39%	0.38	12	M	NM	79.53%	4.59	50.05	8.31%	8.39%
66	42.20%	0.66	12	M	M	47.23%	3.55	23.52	14.65%	8.16%
10	28.52%	0.78	12	M	NM	50.54%	3.78	38.01	8.51%	7.82%
22	30.84%	0.60	12	M	NM	86.60%	4.37	42.74	6.51%	7.63%
141	41.07%	1.10	19	M	M	65.68%	1.30	11.78	14.42%	7.52%
15	50.00%	2.80	1	S	NM	0.00%	2.17	11.92	13.25%	6.87%
75	38.00%	0.20	12	S	M	0.00%	4.46	41.11	7.57%	6.66%
70	27.04%	0.32	12	L	NM	87.32%	4.88	53.52	5.97%	6.59%
69	41.00%	0.47	12	L	NM	85.70%	4.77	50.99	6.14%	6.26%
77	50.30%	1.25	12	M	M	70.94%	1.49	12.66	16.66%	5.52%
111	38.00%	1.10	12	M	NM	53.84%	3.69	33.55	9.02%	5.28%
14	50.00%	2.13	1	S	NM	0.00%	2.67	17.50	12.06%	5.20%
95	40.83%	0.93	12	M	NM	89.94%	3.68	36.91	3.33%	5.15%
50	30.00%	1.68	12	M	NM	80.86%	3.02	23.30	5.19%	5.15%
48	31.56%	0.86	12	L	NM	75.80%	3.53	37.78	4.65%	4.87%
122	38.00%	0.64	12	L	NM	88.05%	10.20	34.35	3.10%	4.19%
120	38.00%	0.89	12	M	NM	79.24%	3.62	37.41	8.77%	4.09%
105	34.70%	1.11	12	M	NM	93.51%	3.81	33.13	2.05%	3.94%
142	38.00%	0.84	12	M	NM	84.00%	5.63	34.60	8.90%	3.74%
85	47.73%	0.24	12	S	M	0.00%	2.94	43.35	5.91%	3.26%
133	57.00%	0.21	12	M	M	0.00%	3.63	49.53	6.52%	2.88%

49	67.61%	0.35	12	M	M	74.52%	4.42	52.19	8.91%	2.83%
57	68.40%	0.23	12	M	M	5.23%	4.12	49.07	7.29%	2.80%
138	42.40%	0.59	12	M	M	66.12%	5.25	41.51	8.73%	2.64%
8	50.00%	1.35	12	M	NM	52.75%	3.86	35.12	11.99%	2.42%
152	41.00%	0.58	12	M	M	84.16%	4.89	37.44	7.27%	2.29%
101	50.00%	0.46	24	M	M	19.85%	3.00	37.24	6.99%	2.28%
30	42.93%	0.91	15	M	M	86.66%	1.26	11.76	8.59%	2.12%
38	48.44%	0.40	52	L	M	89.92%	1.15	12.12	-0.42%	1.77%
121	42.70%	0.40	12	M	M	58.78%	5.99	45.22	5.04%	1.46%
29	44.66%	0.38	12	M	M	60.07%	5.26	52.82	4.15%	1.21%
106	68.09%	0.34	12	S	M	0.00%	6.74	44.62	7.04%	1.07%
25	44.71%	0.46	13	M	M	58.62%	4.88	49.44	6.42%	0.97%
51	54.90%	0.65	12	M	M	90.87%	3.21	36.18	5.90%	0.94%
46	39.50%	0.43	12	M	M	15.66%	4.67	41.22	4.46%	0.94%
86	76.00%	0.35	12	M	M	4.11%	8.66	49.77	9.17%	0.91%
24	62.69%	0.33	12	M	M	64.08%	4.75	55.82	8.21%	0.91%
43	38.60%	0.76	12	L	M	91.63%	5.21	34.72	6.31%	0.87%
60	64.95%	0.25	12	M	M	0.00%	4.21	51.22	5.29%	0.77%
118	49.30%	0.47	12	M	M	57.82%	5.37	49.58	7.36%	0.72%
103	50.00%	0.37	52	M	M	50.53%	3.22	38.65	1.78%	0.42%
127	38.00%	0.24	18	M	M	10.93%	4.56	60.36	2.05%	0.08%
96	59.71%	0.45	12	M	M	0.00%	4.35	47.09	8.80%	0.02%
154	38.00%	1.59	12	M	NM	88.11%	3.06	25.25	7.95%	0.00%
94	38.00%	0.29	13	S	M	0.00%	4.61	49.39	1.89%	-0.31%
71	35.97%	0.68	12	M	M	44.15%	3.94	45.09	4.84%	-0.36%
149	43.22%	0.38	12	M	M	42.19%	4.90	46.33	3.63%	-0.43%
36	35.40%	0.36	52	M	M	88.46%	2.66	33.31	-2.56%	-0.44%
53	38.00%	0.37	12	M	M	23.13%	5.06	45.93	2.80%	-0.54%
137	56.60%	0.31	12	M	M	30.36%	5.50	51.76	3.47%	-0.58%
62	38.00%	0.49	12	M	M	25.57%	4.71	48.69	1.24%	-0.65%
97	57.98%	0.37	12	M	M	39.97%	4.87	49.51	4.81%	-0.72%
148	39.50%	0.28	6	M	M	4.10%	5.29	52.46	2.00%	-0.88%
67	38.00%	0.48	12	M	M	50.63%	4.41	50.04	2.14%	-0.89%
102	40.00%	1.08	12	S	M	78.26%	5.21	38.40	8.47%	-0.90%
40	55.89%	0.24	12	S	M	22.96%	4.95	49.50	5.27%	-0.91%
32	63.79%	0.27	12	M	M	20.70%	4.69	58.57	5.01%	-0.99%
7	50.00%	0.22	52	L	M	92.72%	1.09	18.59	-1.06%	-1.03%
76	45.38%	0.52	9	S	M	0.00%	4.04	44.43	4.26%	-1.04%
139	34.60%	0.90	12	M	M	56.62%	4.76	37.34	6.51%	-1.05%
19	54.00%	0.28	12	M	M	11.02%	5.35	57.97	2.94%	-1.10%
16	45.23%	0.40	12	M	M	0.00%	4.35	53.97	3.16%	-1.23%
23	35.91%	0.49	12	M	M	35.16%	4.50	49.90	3.07%	-1.23%
131	60.24%	0.28	12	M	M	13.64%	5.63	57.62	5.05%	-1.34%
6	42.00%	0.37	18	M	M	28.83%	5.71	53.31	2.75%	-1.53%
130	38.00%	0.26	12	M	M	44.65%	4.10	52.21	0.60%	-1.55%
27	38.00%	0.32	12	M	M	30.21%	4.60	57.42	0.71%	-1.59%
58	49.18%	0.44	12	M	M	16.14%	4.99	50.35	4.04%	-1.66%
65	38.00%	0.75	13	M	M	56.99%	4.24	38.63	3.82%	-1.70%
150	38.00%	0.29	13	M	M	26.27%	4.61	58.79	-0.08%	-1.87%
140	54.00%	0.48	12	M	M	11.73%	5.00	43.14	4.99%	-1.91%
64	31.12%	0.65	26	M	M	65.52%	5.65	42.47	1.87%	-1.94%
68	55.00%	0.23	12	S	M	0.00%	4.46	59.93	0.65%	-2.04%
55	62.00%	0.68	12	M	M	28.40%	7.81	43.81	7.34%	-2.11%
42	38.00%	0.54	18	L	M	52.64%	4.68	43.14	0.85%	-2.19%
135	38.00%	0.35	12	M	M	34.03%	4.17	52.51	0.63%	-2.21%
31	38.00%	0.48	12	M	M	19.21%	4.34	45.84	-0.29%	-2.22%
108	50.00%	0.38	12	M	M	0.00%	4.11	50.08	3.17%	-2.26%
1	39.85%	0.44	12	M	M	26.45%	4.85	51.24	3.07%	-2.27%
54	38.00%	0.46	13	M	M	0.00%	5.11	45.70	0.83%	-2.28%
82	52.84%	0.41	12	M	M	10.05%	4.50	48.59	4.76%	-2.28%
28	38.00%	0.43	12	M	M	39.58%	4.50	51.18	0.38%	-2.45%

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145	38.00%	0.35	12	M	M	84.53%	4.28	50.31	-4.14%	-2.49%
72	43.68%	1.00	12	M	M	0.00%	3.63	35.47	1.45%	-2.60%
26	38.00%	0.41	13	M	M	75.36%	4.76	56.67	-0.26%	-2.66%
125	56.30%	0.48	12	S	M	0.00%	4.27	44.14	2.54%	-2.69%
61	44.40%	0.43	12	M	M	11.18%	4.34	47.54	2.34%	-2.84%
56	62.65%	0.43	13	M	M	71.95%	4.22	51.18	3.62%	-2.84%
35	50.00%	0.34	52	M	M	92.15%	1.08	14.58	-7.92%	-2.95%
115	38.00%	0.86	13	M	M	60.58%	3.43	38.18	2.01%	-2.96%
91	38.12%	0.84	12	M	M	0.00%	3.67	38.36	2.54%	-2.96%
109	37.71%	0.71	12	M	M	0.00%	3.78	42.21	1.10%	-2.99%
123	38.00%	0.91	12	L	M	79.42%	3.74	35.99	1.81%	-3.11%
124	38.00%	0.41	12	M	M	63.48%	4.25	53.77	-0.28%	-3.12%
126	38.00%	0.40	19	L	M	55.61%	4.26	49.72	-0.86%	-3.19%
98	38.00%	0.59	12	M	M	84.51%	4.43	48.02	-0.06%	-3.26%
81	40.68%	0.91	12	M	M	56.96%	6.14	40.60	3.80%	-3.38%
17	63.28%	0.74	12	S	M	30.82%	5.88	42.09	7.38%	-3.39%
33	48.15%	0.57	52	M	M	88.61%	1.50	15.93	-8.15%	-3.47%
92	33.66%	0.96	10	M	M	0.00%	3.60	35.42	1.53%	-3.47%
84	38.00%	0.38	12	M	M	75.33%	4.23	53.13	-1.22%	-3.48%
12	38.00%	0.35	12	M	M	59.24%	4.07	52.55	-0.10%	-3.60%
143	38.00%	0.55	12	M	M	17.65%	4.12	44.53	0.56%	-3.64%
45	38.00%	0.53	26	L	M	64.45%	4.37	50.03	1.32%	-3.75%
47	38.00%	0.61	12	M	M	72.86%	3.96	45.37	2.05%	-3.79%
129	45.61%	0.43	12	M	M	77.06%	5.81	54.55	0.90%	-3.83%
93	38.00%	0.92	12	M	M	88.15%	3.51	37.53	2.05%	-4.00%
3	45.41%	0.57	13	M	M	49.65%	4.27	50.12	0.37%	-4.18%
87	38.00%	0.47	12	M	M	66.27%	8.05	44.44	-0.56%	-4.32%
5	39.07%	0.70	12	L	M	77.64%	4.40	44.38	0.41%	-4.37%
114	70.30%	0.92	13	M	M	19.06%	5.19	39.47	6.59%	-4.37%
41	50.00%	0.52	13	S	M	0.00%	4.77	46.05	0.93%	-4.45%
20	37.09%	0.56	12	M	M	3.10%	3.74	45.87	-1.11%	-4.86%
79	51.23%	0.55	12	M	M	71.78%	5.07	55.12	1.64%	-4.87%
44	43.10%	0.86	12	M	M	49.12%	4.72	44.87	0.13%	-5.30%
146	35.00%	0.43	52	M	M	0.00%	5.87	76.43	-7.48%	-5.31%
110	47.90%	0.87	12	S	M	20.81%	5.29	40.58	3.53%	-5.46%
18	38.00%	0.71	12	M	M	0.00%	3.66	40.68	-0.54%	-5.49%
21	38.00%	0.71	12	M	M	0.00%	3.66	40.68	-0.54%	-5.49%
119	44.00%	0.65	12	M	M	31.33%	4.10	48.86	0.39%	-5.97%
136	38.00%	0.78	14	M	M	21.32%	4.60	39.38	0.92%	-6.77%
34	50.00%	0.30	52	M	M	92.11%	1.04	15.10	-10.32%	-7.11%
113	12.24%	1.19	13	M	M	16.48%	6.02	37.09	-5.66%	-7.76%
13	50.00%	1.14	1	S	M	0.00%	5.00	48.00	-5.85%	-14.57%