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POSTAL RATE COMMISSION
OFFICE OF THE SECRETARY

**BEFORE THE
POSTAL RATE COMMISSION
WASHINGTON DC 20268-0001**

POSTAL RATE AND FEE CHANGES, 2000

)
) Docket No. 2000-1
)
)

**DIRECT TESTIMONY
OF
MICHAEL A. NELSON
ON BEHALF OF
MAGAZINE PUBLISHERS OF AMERICA, INC.
ALLIANCE OF NONPROFIT MAILERS
AMERICAN BUSINESS MEDIA
COALITION OF RELIGIOUS PRESS ASSOCIATIONS
DOW JONES & CO., INC.
THE MCGRAW-HILL COMPANIES, INC.
NATIONAL NEWSPAPER ASSOCIATION
TIME WARNER INC.**

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Figure 1 22

- 1 - On behalf of Amtrak, a major supplier of transportation to the Postal
2 Service, I provided testimony before the STB regarding the appropriate
3 definition of Amtrak's "express" service (Finance Docket No. 33469).
4 This included analysis of the substitutability of Amtrak, truck and freight
5 rail services, and examination of factors affecting the use of Amtrak by
6 the Postal Service. The STB adopted the definition I proposed,
7 facilitating the recent expansion of Amtrak's mail and express service
8 offerings;
9
- 10 - I assisted Canadian Pacific Railway (CP) in assessing the traffic
11 impacts, competitive issues and potential remedial conditions
12 associated with the division of Conrail between Norfolk Southern (NS)
13 and CSX (STB Finance Docket No. 33388). Conrail was the largest
14 single provider of freight rail transportation for the Postal Service. CP
15 relied upon the results of my studies in reaching its settlements with
16 NS and CSX in that case; and,
17
- 18 - I provided testimony regarding competitive and/or statistical issues in
19 six freight rail merger proceedings before the Interstate Commerce
20 Commission. In the proposed merger of Southern Pacific and Santa Fe
21 (Finance Docket No. 30400) I provided extensive testimony regarding
22 the degree of competition between truck and rail services that provided
23 the only analytical foundation cited by the ICC in denying that merger
24 on competitive grounds.
25

26 I have assisted in the preparation of numerous other verified statements
27 presented before various regulatory and legal bodies, and authored many other
28 studies, technical reports and articles in transportation journals.

29 I received my bachelor's degree from the Massachusetts Institute of
30 Technology in 1977. In 1978, I received two master's degrees from MIT, one in
31 Civil Engineering (Transportation Systems) and one from the Alfred P. Sloan
32 School of Management, with concentrations in economics, operations research,
33 transportation systems analysis and public sector management.
34

35 **II. PURPOSE AND SCOPE OF TESTIMONY**
36

37 I have been asked by MPA to investigate issues related to operational and
38 costing practices in the area of purchased transportation, with a particular focus
39 on highway, freight rail and Amtrak. In addition, I address one carrier costing
40 issue related to routine looping and dismount points on motorized letter routes.

1 In the transportation area, my testimony addresses costing issues and
2 operating practices that have prevented the Postal Service and its mailers from
3 realizing the full benefits of the market forces that have been unleashed in U.S.
4 surface transportation. For the past two decades, U.S. transportation policies
5 have emphasized competition and market forces as a replacement for historical
6 regulatory practices. Freight railroads have been given freedoms to engage in
7 contracts and price competition, and through innovation and aggressive pricing
8 have succeeded in diverting a significant share of long-haul truck traffic to rail.
9 Trucking itself has been largely deregulated and provides ubiquitous, highly
10 competitive transportation options, particularly for high-value, service-sensitive
11 traffic. Even Amtrak, long a recipient of substantial federal operating subsidies, is
12 now operating under a mandate to become self-sufficient, and has aggressively
13 implemented innovations to increase its transportation of mail and other freight.

14 Against this background of an increasingly competitive transportation
15 environment, the experience of mailers who attempt to rely on the transportation
16 services procured by the Postal Service stands in stark contrast. Some types of
17 mail, including Periodicals, have experienced rapid growth in transportation cost
18 per piece. Mailers of many types are making dramatically higher use of
19 dropshipping and destination-entry products to bypass most or all of the surface
20 transportation purchased by the Postal Service. In effect, these mailers are
21 finding that they can provide themselves with more economical transportation
22 than the Postal Service provides for them. In this light, dropship discounts serve
23 an important efficiency function by making available to mailers the benefits of
24 improved competitiveness in transportation markets.

25 From a transportation perspective, however, the apparent inability of the
26 Postal Service to compete effectively with dropshipping options is quite
27 incongruous. A typical parcel shipper, whose mail might average 8 lb./c.f., can
28 almost never utilize the full capacity (by weight) of a standard highway trailer.
29 Similarly, a periodicals shipper, whose mail might exceed 20 lb./c.f., may not be
30 able to utilize the full cubic capacity of a standard highway trailer. The Postal
31 Service should be able to create significant economies by combining these (and

1 other) diverse types of mail in transportation. Recent trends in transportation
2 costs and mailing patterns indicate that the Postal Service is failing to achieve
3 such economies, or is failing to develop its costs and rates in a manner that
4 reflects such economies.

5 One obvious possible explanation for these circumstances is that Postal
6 Service costing methods do not accurately measure the surface transportation
7 costs associated with different mail subclasses. This testimony examines those
8 methods, focussing primarily on the volume variability determinations for
9 purchased highway transportation made by witness Bradley (USPS-T18).

10 A second possible explanation for observed transportation-related
11 problems relates to the (in)efficiency of the Postal Service's procured
12 transportation services. Specifically, while transportation services are generally
13 procured through market processes, this testimony identifies ways in which they
14 appear to be unnecessarily costly in satisfying overall transportation
15 requirements.

16 In the following sections, I first identify aspects of witness Bradley's
17 models that lead to overstatement of volume variable purchased highway costs,
18 and develop and present an alternative analysis that avoids much of this
19 overstatement. I then identify two other transportation costing issues that require
20 corrective action, including the Base Year treatment of rail movements involving
21 Amtrak "Roadrainers" and empty equipment. In the carrier area, I present a
22 refinement that is needed in the analysis of variability for routine
23 looping/dismount points on motorized letter routes. Finally, I present a series of
24 proposed roll-forward adjustments to account for attainable efficiency
25 improvements and future cost savings in transportation.

26
27 **III. ANALYSIS OF PURCHASED HIGHWAY TRANSPORTATION COSTS**

28
29 The models of purchased highway transportation costs estimated by
30 witness Bradley are inconsistent in two important respects with the operating

1 practices of the Postal Service. These inconsistencies cause the highway
2 transportation models to overstate volume variability.

3 As described by USPS rebuttal witness Young (USPS-RT-3) in Docket
4 R97-1, USPS transportation requirements are set primarily by processing and
5 delivery schedules at the facilities being served. Furthermore, transportation
6 schedules are set “to make efficient use of postal employees, who account for
7 about 80 percent of postal operating costs.” Docket R97-1, Testimony of witness
8 Young, USPS-RT-3, at p. 8, ll. 11-13. Because transportation routes and
9 schedules are set primarily according to these types of constraints, and not a
10 process that attempts to minimize transportation costs, the Postal Service
11 procures transportation using vehicles with a wide range of capacities. These
12 vehicles are typically not the largest capacity vehicles (vans or trailers) that are
13 available.

14 As a result, the Postal Service has considerable latitude to alter the sizes
15 of vehicles used on most routes in response to volume changes without adding
16 trips. Witness Young specifically described how increasing the capacity of a
17 contracted vehicle costs little in comparison with the cost of additional runs, and
18 how the Postal Service seeks to tailor the capacity it procures to the peak volume
19 requirement on a route without adding runs. Docket R97-1, Testimony of witness
20 Young, USPS-RT-3, at p. 6.

21 *Of course, there are some circumstances where it is not possible to add*
22 *capacity without adding vehicle mileage. In cases where the vehicle serving the*
23 *route is already the biggest van or trailer available, it is not possible for the Postal*
24 *Service to increase the vehicle size. However, when a run must be added, it*
25 *typically provides an opportunity for the Postal Service to adjust routes in a way*
26 *that provides more direct service, and reduce the gross CFM that must be*
27 *procured to satisfy a given transportation requirement. Witness Young presented*
28 *an example of how a route from the Washington BMC to Merrifield and Norfolk*
29 *could be “re-worked ...to skip a stop at the Merrifield P&DC...” in response to an*
30 *increase in volume destined for Norfolk. Docket R97-1, Testimony of witness*
31 *Young, USPS-RT-3, at p. 7, ll. 8-18. In a transportation network of this type,*

1 skipping a stop and establishing a direct run inherently reduces circuitry, and the
2 gross CFM needed to move a given amount of mail. In short, there is an elasticity
3 of gross CFM with respect to net CFM that is less than 1.0, and that causes the
4 Postal Service highway transportation models to overstate the true variability of
5 cost with respect to the volume of mail being moved (as opposed to the CFM
6 procured).

7 The highway transportation models also overstate variability because they
8 fail to reflect the propensity of the Postal Service to adjust capacity through
9 changes in vehicle size rather than changes in trip frequency to accommodate
10 volume changes in the context of a given transportation schedule. Instead, the
11 highway transportation models measure variability as if changes in capacity
12 requirements are routinely satisfied through changes in trip frequency as well as
13 vehicle capacity. The observations in those models include observations from
14 contracts that vary widely with respect to the number of trips supplied. The
15 elasticities estimated by witness Bradley therefore include the impacts on costs
16 associated with hypothetically changing the number of trips to obtain CFM, as
17 well as changing vehicle size.

18 The type of biased variability resulting from the Postal Service highway
19 models can be illustrated in a simple example. In this example, assume that
20 there are two highway contracts for routes serving different facilities. The route
21 on each contract is 50 miles long, costs \$100, and is served by a 40-foot
22 tractor/trailer combination. However, because of schedule differences between
23 the two facilities, the contract at the first facility calls for one run, while the contract
24 at the second facility calls for two runs. In witness Bradley's model formulation,
25 which relies on annual cost and CFM data, the second contract would appear to
26 be providing twice as much transportation (as measured by annual CFM) at twice
27 the cost. All else equal, the model would suggest that there is essentially 100
28 percent volume variability.

1 If volume increased at either facility, however, the Postal Service would
2 avail itself of the fact that increasing the size of the trailer would generally only
3 increase cost by a small amount¹. As indicated by the Postal Service:

4 ...the cubic capacity of a vehicle is generally regarded as being
5 inexpensive relative to the cost of adding extra trips. For this reason it makes
6 economic sense to buy a large vehicle to avoid paying for extra trips.

7
8 MPA/USPS-28 (response of USPS).

9 In the given example, if the Postal Service could obtain service from a 45-
10 foot trailer by increasing the contract rate by 5 percent, it could accommodate up
11 to a 12.5 percent increase in volume. "To avoid paying for extra trips," this would
12 most likely be the way an actual volume change would be accommodated, and
13 the volume variability would be only 40 percent. Unless the vehicle in use is
14 already of a maximum size, or some unusual situation exists, the Postal
15 Service's rational response to a volume increase is to increase the size of the
16 vehicle without increasing trip frequency when it is feasible to do so. Because of
17 this, the degree of volume variability that occurs in practice is lower than that
18 suggested by witness Bradley's model.

19 In addition to these two major factors, the Postal Service's highway
20 models appear to be questionable with respect to at least two items:

- 21 - the treatment of power-only contracts appears to be circular at best, as
22 a constant cubic foot estimate is developed for each area, then used in
23 a model that contains a constant term for each area; and,
- 24 - the methods used by witness Bradley to identify outliers appear in
25 some instances to exclude good data.

26
27
28 To develop an analysis of highway volume variability that is consistent
29 with Postal Service operating practices, I began by partitioning the contracts to
30 segregate the largest vans and the largest trailers from the others. For each
31 vehicle type, I defined "largest" to include vehicles within 300 cubic feet of the
32 maximum possible size. For trailers, this included vehicles ranging from 3001-
33 3300 cubic feet, encompassing 53-foot trailers and tandem 28-foot trailers. For

¹ Professor Bradley appears to acknowledge that trailer costs represent a small fraction of the total cost of a given contract. USPS-T-18 at

1 vans, this included vehicles ranging from 1350-1649 cubic feet. Contracts in each
2 of these categories were treated as 100 percent volume variable, reflecting an
3 assumption that capacity increases could only be obtained through the addition
4 of trips.

5 For the remaining contracts, I revised the econometric analysis so that it
6 isolated the effects of vehicle capacity changes on costs, holding aside the
7 effects of trip frequency changes. The basic method I used to achieve this was to
8 divide the annual cost and CFM data by the number of runs made on the
9 contract, so that the data for each contract reflected the “cost per run” and “CFM
10 per run”. In this way, the model observations no longer differ with respect to the
11 number of runs they represent, and variations in cost associated with variations
12 in vehicle size can be measured.²

13 Initially, I attempted to implement this refinement directly within witness
14 Bradley’s models. However, I encountered immediate difficulties with witness
15 Bradley’s evaluation method, in which the model is estimated on mean-centered
16 data and the variability is taken from the coefficient on the relevant first-order
17 term. To avoid a digression into lengthy debate over proper methods of
18 evaluation³, the balance of my work was conducted using log-log models, for
19 which methods of interpretation are unambiguous.

20 This work consisted of the estimation of two sets of models. In the first set,
21 the “per run” data are further divided by the route length, so the model analyzes
22 cost per mile as a function of cubic feet (and other variables). In the second set,
23 cost per run is analyzed as a function of CFM per run. In both sets, I excluded
24 power-only contracts from the estimation process (applying to power-only
25 contracts and trailer leasing costs the variability found in the analysis of the
26 remaining contracts), and I excluded “outliers” using a small number of consistent
27 criteria. Even with the simpler specifications, the models used in my analysis

24, lines 5-7.

² In the model estimation process, each observation was weighted according to the number of runs it represented from the original contract data.

³ A partial history of various theories and arguments in this area is presented in the testimony of Postal Service witness Bozzo (USPS-T15).

1 generally exhibited a high degree of explanatory power, and high statistical
2 significance for the variables needed to estimate the relevant elasticity.

3 The details of this analysis are presented in a library reference
4 accompanying this testimony. I note that because these models, like the Postal
5 Service models, do not account for the elasticity of gross CFM with respect to net
6 CFM, they likely overstate true variability. Nevertheless, the results of my
7 analysis, which are summarized in Table 1, indicate that total volume variability
8 for purchased highway transportation is approximately 53.1 percent, and that the
9 Postal Service methodology overstates this variability by approximately 28.5
10 percentage points. For Periodicals, the Postal Service methodology overstates
11 volume variable highway transportation costs in BY98 by \$87.8M.

12 13 IV. OTHER TRANSPORTATION COSTING ISSUES

14 15 A. Amtrak Roadrailleurs

16
17 As part of its effort to obtain increased revenues from its mail and
18 "express" business, Amtrak has begun using "Roadrailleurs". A Roadrailer is a type
19 of trailer that can operate over the highway in a normal tractor/trailer
20 combination, or be quickly adapted to ride on rails without the types of intermodal
21 rail cars normally required to transport highway trailers and shipping containers.
22 When added to the roster of Amtrak service offerings, Roadrailleurs provided a
23 new capability for truckload movement.

24 Roadrailer movements are not sampled by TRACS,⁴ so the precise
25 composition of mail moving on Roadrailleurs is not known. However, because
26 Amtrak is only investing in this technology to attract new business, it can
27 reasonably be concluded that Roadrailleurs are not being used to divert the Postal
28 Service volume that Amtrak already moves (and that is sampled by TRACS).
29 Rather, the speed, reliability, distance and truckload volume characteristics of
30 Roadrailer service make it most analogous to inter-SCF highway transportation

⁴ See MPA/USPS-T1-6 (response of Postal Service witness Xie).

1 with respect to the types of movements for which it could beneficially be used to
2 attract traffic from the Postal Service.

3 The Postal Service has indicated that \$4.5M of BY98 Amtrak accrued
4 costs were associated with Roadrailer movements.⁵ I have removed this amount
5 from the pool of accrued Amtrak costs, and distributed it to classes and
6 subclasses using the inter-SCF distribution key. On this basis, I estimate that the
7 USPS BY98 treatment of Amtrak Roadrailer movements overstates Periodicals
8 costs by \$3.1M.

9 **B. Empty Equipment Movement – Rail**
10

11 The USPS analysis of empty equipment movements via rail improperly
12 treats such costs as if they were caused by the mail that moves on freight rail
13 and Amtrak. Empty equipment movements via rail include equipment moving
14 to/from MTESSCs that was or will be used for other types of surface
15 transportation.

16 To account for this, I have revised the distribution key applied to rail empty
17 equipment moves so that it reflects the combined distribution of volume variable
18 costs associated with purchased highway, freight rail, Amtrak and water
19 movements. The USPS BY98 treatment of empty equipment movements via rail
20 overstates Periodicals costs by \$5.3M.

21
22 **V. VARIABILITY OF ROUTINE LOOPING/DISMOUNT STOPS ON**
23 **MOTORIZED LETTER ROUTES**
24

25 MPA also requested that I examine an issue relating to city carrier costs,
26 about which I testified in Docket R97-1. My reexamination of this issue leads me
27 to suggest a refinement in my previous analysis.

28 The variability of routine loops/dismounts, which is applied in the analysis
29 of driving time on motorized letter routes in CRA worksheet 7.0.4.4, was first
30 estimated in Docket No. R97-1. The value of 40.99% was determined by me on
31 the basis of the variability characteristics of different types of routine

⁵ See MPA/USPS-22 (supplemental response of the Postal Service).

1 looping/dismount stops, and their relative proportions, using input from a survey
2 of delivery supervisors. The rationale for the specific computation was described
3 in my response to an interrogatory. See Docket R97-1, ADVO/USPS-T19-9
4 (response of USPS witness Nelson).

5 Basically, routine loops that are established on the basis of volume/weight
6 were treated as 100% volume variable because of the constraints on the
7 formation of such loops imposed by the 35-lb. weight limit on carrier satchel
8 loads. Routine loops and dismounts established for reasons other than the
9 volume/weight of mail were treated as 0% volume variable, as the number of
10 such stops would remain fixed as volume changes. The proper treatment for the
11 remaining stops – dismounts established on the basis of mail volume/weight –
12 was somewhat ambiguous.

13 On the one hand, existing dismounts made because of volume/weight will
14 remain fixed if volume increases. On the other hand, volume increases likely will
15 cause new dismounts to be made because of volume/weight. In the absence of
16 any other information, this group of dismounts was ascribed the cumulative
17 variability of the other 3, leading to the overall estimated variability of 0.4099, as
18 shown below:

19

Stop Type	Total Stops	% of Stops	Volume Variability
Loops Due to Volume/Weight	242,294,460	0.3215	1.0000
Loops Due to Other Factors	85,273,149	0.1131	0
Dismounts Due to Other Factors	263,516,968	0.3496	0
Dismounts Due to Volume/Weight	162,610,282	0.2158	0.4099 ⁶
Total	753,694,859	1.0000	0.4099

20
21 Further consideration has led me to conclude that there is an interaction
22 between volume-driven looping points and volume-driven dismounts that was not
23 accounted for in the R97-1 analysis. Basically, stops that would become new
24 volume-driven dismounts in the presence of a volume increase are currently

⁶ Calculated as $(242,294,460 / (242,294,460 + 85,273,149 + 263,516,968))$.

1 served on loops. The conversion of such stops from loop delivery points to
 2 (volume-driven) dismissals as volume increases moderates the need to add
 3 looping points. If the analysis assumes that a volume increase on volume-driven
 4 loops is accommodated entirely by an equal percentage increase in the number
 5 of loop parking points, none of the stops on those loops will need to be converted
 6 to dismissals, and the number of volume-driven dismissals will not change. In
 7 light of these considerations, if the 100% figure is used for volume-driven looping
 8 points, it would be most reasonable to treat volume-driven dismissals as fixed
 9 (i.e., 0% variable). This treatment yields an overall variability of 0.3215, and is
 10 shown below:

11

Stop Type	Total Stops	% of Stops	Volume Variability
Loops Due to Volume/Weight	242,294,460	0.3215	1.0000
Loops Due to Other Factors	85,273,149	0.1131	0
Dismissals Due to Other Factors	263,516,968	0.3496	0
Dismissals Due to Volume/Weight	162,610,282	0.2158	0
Total	753,694,859	1.0000	0.3215

12

13

14 **VI. ROLL-FORWARD ISSUES**

15

16 **A. Highway Contract Renewal Process**

17

18 Under current contracting procedures, the rates paid when highway
 19 contracts are renewed are, on average, materially higher than the rates paid
 20 when the Postal Service obtains (competitive) bids for new contracts. As shown
 21 in Table 2, the "premium" being paid on renewed contracts is over \$100M
 22 annually, and in BY98 cost Periodicals over \$19M. This represents 8.9 percent of
 23 total BY98 highway transportation costs for Periodicals.

24 The Postal Service may pay such a premium in the belief that it is required
 25 to retain contractors who are prepared to provide the Postal Service with a high
 26 level of performance. For the trucking industry, however, the security and

1 processing requirements of the Postal Service are not unlike those of many
2 shippers of high-value, expedited and just-in-time shipments that are handled
3 successfully every day. The Postal Service, like any shipper, must select
4 contractors and manage purchased services with care. However, it is simply
5 unnecessary for them to pay a premium to retain qualified highway contractors.
6 In the highly competitive trucking industry, where modest shifts in the economy or
7 factor prices can wreak havoc with individual firms, the stability provided by the
8 4-year duration of a standard USPS highway contract, the regularity of USPS
9 schedules and the durability of the organization itself provides a comfort level
10 unattainable from most shippers. If anything, USPS should be commanding a
11 discount, and not paying a premium, to fulfill its highway contracting
12 requirements.

13 Tightening administrative requirements to ensure competitive terms on
14 renewed contracts would enable these costs to be saved. Because of the 4-year
15 duration of highway contracts, 1/3 of these savings could be implemented by the
16 end of the test year. To reflect this in the Test Year, purchased highway costs
17 should be reduced by $(8.9/3=)$ 3.0 percent. This would result in savings for
18 Periodicals of approximately \$3.9M.

19

20 B. Highway Contract Obsolescence

21

22 There is an inherent tension between the Postal Service's practice of
23 using long-term contracts to foster a stable operating system, and the provision
24 of a system that can be efficient and flexible in the face of change. Within the
25 duration of a standard highway contract (4 years), there have been multiple
26 railroad mergers (affecting the competitiveness of freight rail services); wide fuel
27 price swings; freight rail service disruptions; new Amtrak service initiatives (e.g.,
28 Roadrillers, Acela); changes in USPS product offerings and changes in USPS
29 operations (e.g., DPS). Any of these changes have the potential to alter the
30 preferred mix of ground transportation services procured by the Postal Service.

1 The attachment to the Postal Service's response to MPA/USPS-16 shows
2 that upon expiration, approximately 3.2 percent of highway contracts are for
3 service that is no longer needed. If the events that produce such obsolescence
4 occur at a uniform rate over time, on average 1.6 percent of highway contracts in
5 effect at any given time are for service that is no longer needed.

6 Except in very unusual circumstances, highway contractors should be
7 amenable to renegotiation of unneeded contracts to serve needed routes and
8 schedules, particularly if such renegotiation would in effect extend the term of
9 their contract (i.e., by restarting the 4-year contract term on the new route). A
10 program to identify and renegotiate unneeded contracts prior to their expiration
11 would affect approximately \$29.4M of BY98 purchased highway costs, of which
12 \$3.5M was distributed to Periodicals. To account for the effects of such a
13 program in the Test Year, 1.6 percent of purchased highway cost should be
14 removed. This would result in savings for Periodicals of approximately \$2.0M.

15 16 C. Amtrak Premium and Terms 17

18 In the response to an interrogatory (MPA/USPS-26), the Postal Service
19 characterizes Amtrak as a less-than-truckload network. However, in BY98
20 approximately \$58.3M (over 94%) of the \$61.5M spent on regularly-contracted
21 Amtrak segments accrued on movements where the cubic feet of procured
22 Amtrak capacity exceeded the cubic capacity of a tractor-trailer.⁷

23 I have analyzed the relationship between Amtrak costs on these
24 segments, and cost that would be incurred by the Postal Service to obtain
25 equivalent capacity through additional procurement of inter-SCF highway
26 transportation. Specifically, I compared the cost incurred by the Postal Service
27 for each Amtrak segment, as shown in Appendix I of USPS-LR-I-50, with the
28 estimated cost of inter-SCF transportation over the mileage of the corresponding
29 point-to-point highway movement. To estimate the highway cost, I used the cost
30 per CFM (by mileage block) for inter-SCF transportation supplied by tractor-

⁷ This is approximated as 30 or more linear feet of Amtrak space.

1 trailers on non-renewal contracts shown in HCSS, and an assumption that each
2 linear foot of Amtrak space corresponds to 90 cubic feet of capacity.

3 This assumption may overstate the amount of capacity actually supplied
4 by Amtrak, as most Amtrak capacity is believed to be supplied using MHC's,
5 which provide 69.8 to 78.3 cubic feet per linear foot.⁸ The analysis may also
6 overstate the cost of substitute highway transportation, since it assumes that the
7 trucks will follow the Amtrak route, and will not take advantage of shorter paths
8 that likely exist between origins and destinations that utilize transfers between
9 Amtrak routes.

10 Despite these conservative assumptions, my conclusion is that
11 approximately \$57.3M is spent on Amtrak segments where the payments to
12 Amtrak exceed the cost of purchased highway transportation. As shown in Figure
13 1, these segments comprise virtually the entirety of Amtrak's transcontinental
14 service, as well as its north-south service on the East Coast. If the Postal Service
15 replaced this Amtrak service with new contract highway service procured at the
16 rates it paid in BY98 for tractor trailers providing inter-SCF transportation, at least
17 \$19.0M would be saved. Put another way, 30.9% (= 19.0/61.5) of BY98 Amtrak
18 contracted capacity costs reflect a premium above the cost of equivalent and
19 readily available truck transportation.

20 If the Postal Service is already consolidating LTL shipments to truckload
21 volumes, it receives no particular benefit from paying Amtrak supra-competitive
22 rates to move those volumes. Indeed, this situation produces disadvantages for
23 all parties:

- 24 - Mailers pay a "premium" of over 30 percent without discernible benefit;
- 25
- 26 - The cost floor of Postal Service products is pushed upwards by the
- 27 assumed 100% variability of these costs; and,
- 28
- 29 - Amtrak, by pricing higher than truck, fails to attract highway volume
- 30 from the Postal Service that could economically move via Amtrak, and
- 31 would enhance Amtrak's net revenues and prospects for self-
- 32 sufficiency.
- 33

⁸ See the response of the Postal Service to MPA/USPS-44.

1 Several approaches are available to address this issue:

- 2 i. USPS could use this information to negotiate more vigorously with
3 Amtrak to obtain a truck-competitive rate;
4
5 ii. If this does not produce satisfactory results, USPS could actually
6 convert the traffic to truck and obtain an appropriately reduced rate;
7 or,
8
9 iii. USPS and Amtrak could create additional benefits for all parties by
10 restructuring their agreement so that for a fixed payment, USPS
11 obtains the option to use Amtrak at marginal rates that are
12 somewhat below truck rates. On a terms-of-incurrence basis, this
13 would produce volume-variability of less than 100%, while creating
14 an opportunity for the Postal Service to economize on a portion of
15 the \$660+ million it spends annually on inter-SCF and inter-BMC
16 highway transportation, and an opportunity for Amtrak to make
17 money from that traffic.
18

19 If the Postal Service undertakes any of these options, volume variable Amtrak
20 costs would be reduced by at least the amount of the premium. To account for
21 this in the Test Year, Amtrak costs should be reduced by \$19.0M. The portion of
22 this savings associated with Periodicals is \$15.4M. If option (iii) is developed, it
23 would produce additional savings for mail now moving on purchased highway
24 transportation.
25

26 D. Freight Rail Rates 27

28 In its response to an MPA interrogatory⁹, which included a request for
29 “documentation of any and all volume incentive rate, discount or credit terms in
30 effect for [freight rail] transportation provided to the Postal Service in BY98”. The
31 Postal Service states:

32 “(t)here are no such rates, discounts or terms. There is not
33 even language in postal contracts with the freight railroads that
34 provides for the credit, volume discounts, incentive rates and the
35 like. The Postal Service simply does not have the volume of
36 business with the freight railroads required to obtain these terms.”
37

⁹ See the supplemental response of the Postal Service to MPA/USPS-40 (b), dated 5/2/00.

1 With approximately \$200M in annual freight rail traffic, USPS is not the
2 largest intermodal customer. By comparison, in public statements UPS estimates
3 its use of freight rail to be approximately \$750M annually. However, UPS has so
4 much clout that entire trains are scheduled to accommodate its needs.

5 The Postal Service may have come to believe that it isn't big enough to
6 qualify for volume discount rates by virtue of having been primarily a customer of
7 Conrail. Over 54 percent of USPS freight rail expenses in BY98 were for service
8 from Conrail, by far the largest USPS expenditure on any single freight railroad.

9 Operating as a near-monopoly over much of its service area, Conrail
10 historically did not experience the type of intramodal competitive pressure that
11 has driven the proliferation of volume discount rates among other carriers.
12 However, because of the recent break-up of Conrail, the Test Year will see
13 competition between 2 and in some cases 3 Class I railroads take the place of
14 Conrail.

15 A fundamental premise of the Conrail break-up transaction was that
16 intermodal rates in the Conrail service area would drop by approximately 10% as
17 a result of increased competition. To account for this, Test Year freight rail costs
18 should be reduced by 5.4 percent. This reflects a 10 percent reduction on
19 Conrail's 54 percent share, and would lead freight rail costs for Periodicals to be
20 reduced by \$0.9M.

21 In addition to this reduction, the Postal Service should be able to obtain
22 volume discounts from at least some of the other railroads from which it
23 purchases transportation services. Freight railroads generally seek to obtain
24 high utilization of their infrastructure, and volume discounts have been a common
25 tool used to ensure that the traffic of even moderately large shippers is tendered
26 to a given railroad, and not to its competitor(s). The Postal Service may not be
27 the largest of rail intermodal shippers, but it is easily large enough to command
28 volume discounts in a competitive marketplace. Greater aggressiveness on the
29 part of the Postal Service in seeking such terms could be expected to lead to
30 additional savings.

31

1 E. Additional Items For Which Data Not Yet Available

2

3 A number of additional items may produce savings for Periodicals that are
4 achievable by TY01. These include the following:

5

6 1. Conversion from Freight Rail to Highway

7

8 In the response to MPA/USPS-31b, the Postal Service indicates that it
9 anticipates higher costs as a result of the service-driven conversion of freight rail
10 traffic to highway. Current post-merger rail service disruptions in the East, like
11 those that occurred in the West beginning in 1997, are expected to dissipate by
12 the Test Year, removing any need for conversion to highway.

13 The Postal Service should remove from the Test Year any increment in
14 costs associated with an assumed need to convert freight rail traffic to highway.

15

16 2. Stacking of Pallets

17

18 The generally low capacity utilization in purchased highway transportation
19 interacts with methods used to collect TRACS data to overstate cost causality for
20 some types of mail. Specifically, pallets (typically used for bulk movement of
21 Periodicals) may not be stacked when floorspace utilization is low. In a TRACS
22 test, no adjustment is made for the fact that such pallets do not preclude use of
23 the airspace above them (up to 72"), and could be stacked on each other if
24 required¹⁰. The Postal Service should modify the TRACS-Highway data collection
25 process so that it collects information about the stacking of pallets similar to
26 TRACS-Amtrak tests. In the meantime, the Postal Service should estimate the
27 potential reduction in floorspace utilization that would be associated with the
28 stacking of pallets, and make appropriate adjustments in the TRACS-Highway
29 distribution keys.

30

¹⁰ See the response of Postal Service witness Xie to FGFS/USPS-T1-25.

1 3. Study of Transportation Utilization and “Reductions in Unutilized
2 Capacity”
3

4 As described in its response to MPA/USPS-17c, the Postal Service is
5 conducting a study of transportation utilization, and may be able to realize
6 savings through reductions in unutilized capacity. Any such savings that are
7 identified for the Test Year should be applied.
8

9 4. \$100M Future Cost Reduction
10

11 As described in its response to MPA/USPS-30 the Postal Service is
12 expecting to realize \$100M savings in purchased highway transportation through
13 reductions in vehicle mileage, fuel and trailer leasing expenses. Any such
14 savings that are identified for the Test Year and do not duplicate savings
15 reported elsewhere should be applied.
16

17 5. Process Improvements, Cycle Time Reductions, and Possible Unit
18 Cost Reductions
19

20 As described in its response to MPA/USPS-45, the Postal Service may
21 be able to achieve savings through process improvements, cycle time reductions
22 and unit cost reductions. Any such savings that are identified for the Test Year
23 and do not duplicate savings reported elsewhere should be applied.

Table 1

Summary of Results Regarding Analysis of Purchased Highway Transportation
Volume Variability

Account Type	Accrued Cost	Volume Variable Cost - USPS BY98	Volume Variable Cost - Revised
Intra-SCF	780,882	501,814	350,327
%		0.643	0.449
Inter-SCF	451,826	409,337	350,340
%		0.906	0.775
Intra-BMC	272,745	268,989	171,348
%		0.986	0.637
Inter-BMC	264,390	259,271	79,855
%		0.981	0.302
Plant Load	45,685	41,025	9,228
%		0.898	0.202

Total Highway	1,838,700	1,500,532	976,651
%		0.816	0.531

Table 2

Estimated Savings from Highway Contract Renewal at Market Rates

Type	Mileage	Cost (\$M)	Cost/CFM	Non-renewal Cost/CFM ¹¹	Savings (\$M)	%	BY98 2C Savings (\$M)
Inter	0-250	164.3	.000555	.000481	21.9		
-SCF	251-500	55.9	.000409	.000313	13.1		
	500+	27.6	.000353	.000296	4.5		
	Total				39.5	8.7	4.7
Inter	0-250	12.3	.000497	.000481	0.4		
-BMC	251-500	35.3	.000401	.000313	7.7		
	500+	181.2	.000376	.000296	38.6		
	Total				46.7	17.7	8.7
Intra	0-250	85.1	.000454	.000481	(5.1)		
-BMC	251-500	45.4	.000399	.000313	9.8		
	500+	9.6	.000325	.000296	0.9		
	Total				5.6	2.1	0.6
Intra	0-250	476.9	.001033	.001044	(5.1)		
-SCF	251-500	6.0	.000455	.000323	1.7		
	500+	2.0	.000525	.000296	0.9		
	Total				(2.5)	(0.3)	(0.2)
Plant	0-250	15.3	.000773	.000235	10.6		
Load	251-500	2.2	.002991	.000627	1.7		
	500+	0.4	.000505	.000382	0.1		
	Total				12.4	27.1	5.5
				GRAND TOTAL	101.7		19.3

Source: HCSS.

¹¹ Intra-SCF over 500 mi., inter-BMC and intra-BMC have at most 1 non-renewed contract in each cell. Inter-SCF cost is used as proxy.

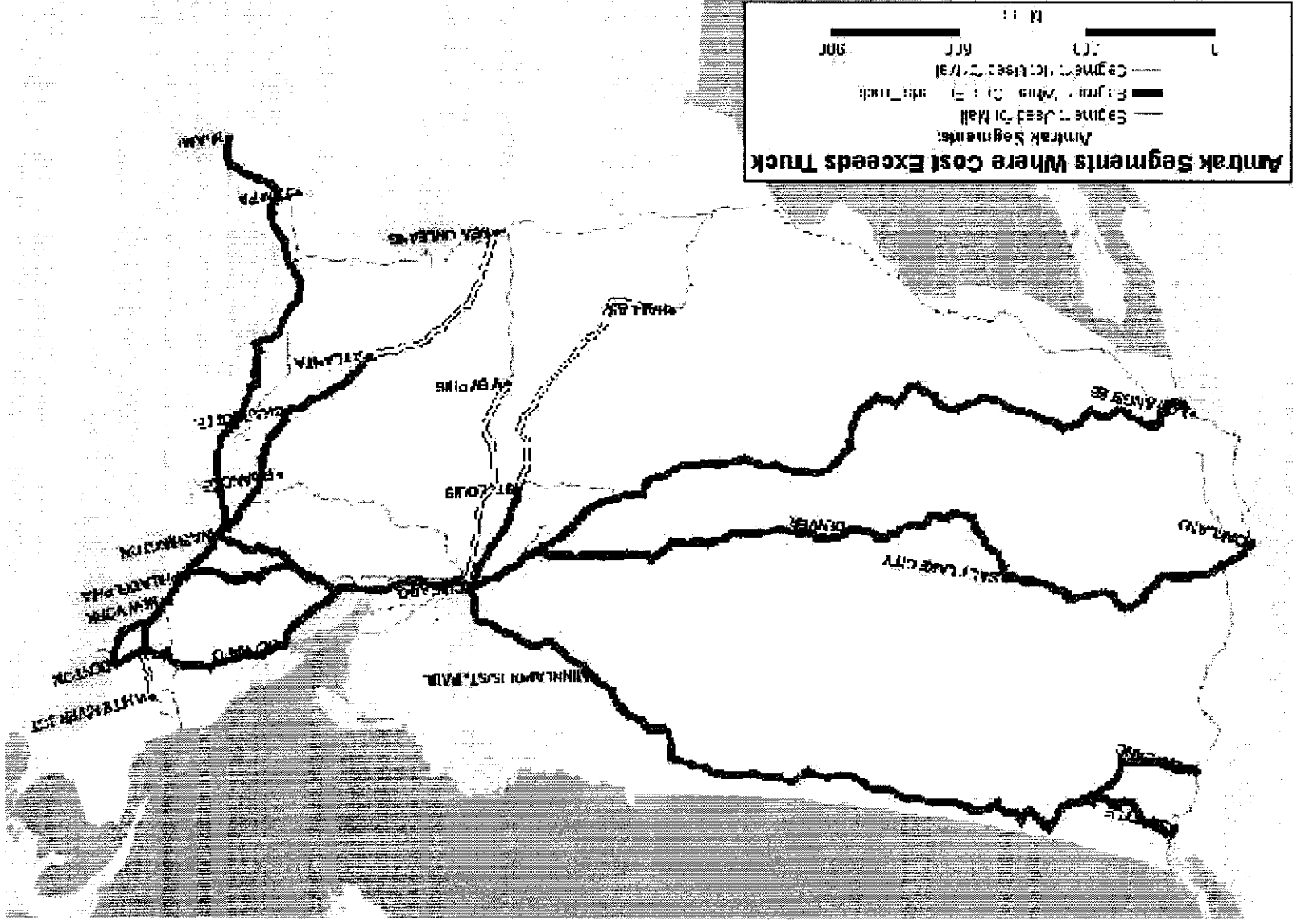
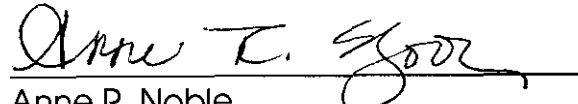


Figure 1

CERTIFICATE OF SERVICE

I hereby certify that I have this date served the foregoing document upon all participants of record in this proceeding in accordance with the Commission's Rules of Practice.


Anne R. Noble

Washington DC
May 22, 2000