Before The POSTAL RATE COMMISSION WASHINGTON, D.C. 20268-0001

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Postal Rate and Fee Changes, 2000

Docket No. R2000-1

RESPONSE OF THE UNITED STATES POSTAL SERVICE WITNESS BARON TO INFORMATION REQUEST MADE AT HEARING (August 31, 2000)

Counsel for the OCA, during the oral cross-examination of witness Baron,

requested that Mr. Baron perform and provide an analysis of minimum load times

observed at one and two-letter stops for various receptacle-container type categories.

See Tr. 43/18757. The Postal Service hereby provides the requested response. The

request is restated and followed by the response.

Respectfully submitted,

UNITED STATES POSTAL SERVICE

By its attorneys:

Daniel J. Foucheaux, Jr. Chief Counsel, Ratemaking

Richard T. Cooper 🖊

475 L'Enfant Plaza West, S.W. (202) 268-2993; Fax: -5402 Washington, D.C. 20260-1137 August 31, 2000

At Tr. 43/18757, the OCA asked witness Baron to provide a data set containing records of all 1985 LTV data recorded at stops that received one or two letter mail pieces, and to report by receptacle-container type category the instances in which the minimum observed load times at two letter stops are less than the minimum observed load times at one letter stops.

Response:

The requested data set is provided in USPS-LR-I-487. The following table

presents the requested results as derived from that data set.

Minimum Observed Load Times at Two-Letter Stops That Are Less Than Minimum Observed Load Times at One-Letter Stops By Receptacle-Container Type					
Receptacle- Container Type	Stop Type	Minimum Observed Load Time at One-Letter	Minimum Observed Load Time at Two-Letter Stops	Difference	Total Number of Tests at One and Two-Letter Stops in this Category
Curbline Box – Loose Mail	MDR	7.3	1.2	6.1	5
Rural-Type Box – Loose Mail	MDR	1.0	0.7	0.3	7
Handed to Customer – Loose Mail	MDR	1.8	0.5	1.3	3
Door Slot – Sack or Pouch	SDR	2.4	1.2	1.2	29
Placed Under Door – Loose Mail	SDR	5.8	1.8	4.0	3
Door Slot – Loose Mail	BAM	1.5	0.9	0.6	7
Mail Box – Bundled Mail	BAM	4.4	1.3	3.1	4
Rural Type Box – Loose Mail	BAM	11.1	1.1	10.0	2
Placed Under Door – Loose Mail	BAM	5.7	3.4	2.3	2

This table shows that the methodology that I proposed in USPS-RT-12

(pages 15-21) for estimating fixed stop times as weighted-average minimum

observed load times at one-letter stops does virtually eliminate the problem caused by the presence of two-letter minimum load times that fall below oneletter minimum load times. The table shows that, for MDR stops, there are three receptacle-container type categories for which minimum load times at two-letter stops are lower than at one-letter stops, compared with seven categories for which the reverse is true. (See USPS LR-I-487, Table 1A). Moreover, for only two of these three categories is the discrepancy more than a half a second, and these two categories account for only 8 out of the 112 load time tests that the 1985 LTV Study conducted at one and two-letter MDR stops.

For SDR stops, minimum load times at two-letter stops are lower than at one-letter stops for only two out of a total of twenty-one receptacle-container types. (See USPS-LR-I-487, Table 2A). These two categories account for only 32 out of 2,487 LTV tests conducted at one and two-letter SDR stops.

For BAM stops, minimum load times at two-letter stops are lower than minimum load times at one-letter stops for four out of sixteen receptaclecontainer categories. (See USPS-LR-I-487, Table 3A). These four categories account for only 15 out of 115 LTV tests conducted at one and two-letter BAM stops.

Thus, the revised estimation procedure presented in USPS-RT-12 (see pages 15-20) for computing weighted-average fixed stop times does effectively negate the problem of including in the initial unweighted computation (presented in Docket No. R97-1, USPS-T-17) minimum load times at one-letter stops that exceed minimums at two-letter stops. The extent of the remaining problem is

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negligible. It occurs in only a few receptacle-container type categories, and for some of these categories, the excess of the one-letter load times over two-letter load times is insignificant – equaling 0.6 seconds or less. Moreover, those categories for which the excess is greater than 0.6 seconds account for 7% or less of the relevant total of one and two-letter LTV tests.

Thus, it is not surprising that when the two-letter minimum load times are combined with the one-letter minimum load times to produce new alternative weighted-average estimates of fixed stop time, the results vary only slightly from the initial weighted-average estimates presented in Tables 1-3 of USPS-RT-12. (Tables 1A-3A of USPS-LR-I-487 compute these new, alternative weightedaverage estimates using all two-letter and one-letter minimum observed load times). In addition, as the analysis at pages 16-18 of USPS-LR-I-487 shows, the introduction of the two-letter minimum load times also incorporates into the weighted-average computation new, relatively high minimum load times for certain categories that are not observed in the one-letter data set. This introduction also increases the weights assigned to other, relatively high minimum load times. Moreover, both such results significantly offset any negative effect that the introduction of the lowest minimum two-letter load times into the analysis might have on the final weighted-average estimate.

That the inclusion of two-letter minimum load times with the one-letter minimum load times results in new weighted-average fixed stop times that deviate negligibly from the initial Table 1-3 estimates affirms the soundness of the weighted-average approach. It demonstrates the robustness of the

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weighted-average computation with respect to one's choice among alternative data sets that can be used in that computation.¹

In contrast, the alternative residual-based approach to estimating fixed stop times suffers from much larger, much more serious, and completely inexplicable discrepancies. The BY 1998 residual-based measures of fixed stop time range from a low of 6.65 seconds per SDR stop to 17.35 seconds per BAM stop all the way up to an unbelievable 39.90 seconds per MDR stop. (See Docket No. R2000-1, USPS-RT-12 at 21, and responses to USPS/OCA-T5-38 and 39). These estimates are much higher, and thus much less operationally feasible than the fixed stop time estimates of 0.63 to 1.70 seconds that are produced by the weighted-average approach (See Tables 1-3 in USPS-RT-12 and Tables 1A-3A in USPS-LR-I-487). Moreover, the differences among these residual measures are themselves so large as to undermine the plausibility of those measures. There is simply no operational story that can explain or justify the 10.7 seconds by which the residual measure of BAM fixed time per stop (17.35 seconds) exceeds the residual measure of SDR fixed time per stop (6.65 seconds), or the 22.55 seconds by which the residual measure of MDR fixed stop

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¹ It is also worth noting that both the initial and new weighted-average minimum load times deviate only marginally from the corresponding unweighted averages presented in Docket No. R97-1 USPS-T-17 and Docket No. R2000-1 USPS-T-12, thus further confirming the robustness of the direct estimation procedure for estimating fixed stop times.

time (39.90 seconds) exceeds the BAM estimate. Both the fixed stop time estimates themselves and their deviations from one another are much too large to conform with operational reality.

DECLARATION

I, Donald M. Baron, declare under penalty of perjury that the foregoing answers are true and correct to the best of my knowledge, information, and belief.

Vonald M. Baron

Date: 8-31-00

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CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon all participants of record in this proceeding in accordance with section 12 of the Rules of Practice.

. Coym Richard T. Cooper

475 L'Enfant Plaza West, S.W. Washington, D.C. 20260-1137 August 31, 2000