UNITED STATES OF AMERICA
POSTAL RATE COMMISSION
WASHINGTON, D.C. 20268-0001

Before Commissioners: Edward J. Gleiman, Chairman;
George W. Haley, Vice Chairman;
W.H. "Trey" LeBlanc III; George A. Omas

Postal Rate and Fee Changes Docket No. R97-1

NOTICE OF INQUIRY NO. 3 ON COVERAGE-RELATED LOAD TIME

(January 12 , 1998)

In this docket, Postal Service witness Baron proposes to redefine one of the traditional components of load time as access time, and to change the way that remaining coverage-related load time is analyzed. The parties are asked to comment on the appropriateness of these and other possible changes to the established approach to measuring the variability of load time. Comments should be filed no later than 21 days from the date of this Notice.

In USPS-T-17, witness Baron contends that the residue of cost that remains after deducting elemental load time costs from accrued load time costs cannot be associated exclusively with coverage. For that reason, he argues that this residue should not be used to analyze the variability of load time. He asserts that the variability of load time should be analyzed in three steps that involve three distinct cost drivers. Step 1 measures a "stops effect." He defines this as all time spent preparing to load mail. He asserts that it is a fixed time per stop, and that it is unaffected by delivered volume or delivery coverage. Because it is a fixed time per stop, he asserts that it should be treated as access time rather than load time. For each stop type, he constructs a proxy for preparation time and deducts it from total accrued load time. Id. at 9, 13, 34. Step 2 regresses remaining accrued load time on delivered volume to find "elemental" load

time for each stop type. Step 3 regresses the same pools of accrued load time on the number of possible deliveries (a proxy for actual deliveries) to find coverage-related load time (the "deliveries effect"). Witness Baron applies Step 3 only to MDR and BAM stops, because only those stop types have more than one possible delivery at each stop. Id. at 5, 16-19.

The assumption that preparation time is a fixed time per stop appears to conflict with certain properties of coverage, and with the available data on preparation time. For example, for SDR stops, delivery coverage is identical to stop coverage. For an individual SDR stop, delivery coverage is either zero or 100 percent. For SDR stops as a group, however, delivery coverage varies with delivered volume just as delivery coverage varies with delivered volume for MDR stops as a group, and for BAM stops as a group. The time spent preparing to load mail is one of the three activities included in accrued load time by the Load Time Variability (LTV) study.[1] These observed preparation times vary substantially at individual stops. See USPS LR-H-137.

For MDR and BAM stops, witness Baron argues that the amount of load time that varies with volume, and the amount of load time that varies with delivery coverage, should be found by regressing accrued load time simultaneously on delivered volume and on possible deliveries (serving as a proxy for actual deliveries). Witness Baron notes that in the established coverage models, each of these cost drivers is a discreet explanatory variable with its own coefficient. He argues that the coefficient of delivered volume can be interpreted as an estimate of the elasticity of load time with respect to delivered volume, and the coefficient of possible deliveries can be interpreted as an

[1] The LTV study defines load time as the sum of 1) preparation time (time spent preparing mail for delivery or collection), 2) load time (time spent placing mail into delivery receptacles), and 3) attend time (time spent serving or waiting on an individual customer). Under the established method, all of the time associated with these three activities are subjected to regression analysis to determine their variability with the volume of delivered mail. See Docket No. R87-1, USPS-T-7 (Hume) Exh. USPS-7C at 4 and 16 of 27, and PRC Op. R87-1, para. 3313.

estimate of the elasticity of load time with respect to actual deliveries. USPS-T-17 at 16-19.

In view of the above, the parties are asked to discuss:

1) whether delivery coverage affects SDR stops as a group in the same general way that it affects MDR as a group, and BAM stops as a group;

2) whether for SDR stops, the stop coverage model advocated by witness Baron should be used to regress total accrued load time (not adjusted for any "stops effect") simultaneously on delivered volume and on actual stops (the equivalent of actual deliveries), in the same general way that witness Baron applies his delivery coverage models to MDR and BAM stops;

3) if the effect of actual deliveries on load time is accounted for econometrically for all stop types, is there any load time remaining that can be associated with actual stops?

Parties may find it useful to evaluate the hypotheticals in the attachment to this Notice in responding to these discussion points.

By the Commission.

(S E A L)

Margaret P. Crenshaw

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Secretary

HYPOTHETICAL NO. 1

Suppose a system has six Single Delivery Residential (SDR) stops, one Multiple Delivery Residential (MDR) stop with two possible deliveries, and one Business and Mixed (BAM) stop with two possible deliveries. There are ten letters to be delivered that are identical. Distribution of the ten letters follows two scenarios:

1) Two letters are delivered at each of three SDR stops, two letters are delivered to one of the two MDR delivery points, and two letters are delivered to one of the two BAM delivery points.

2) Two letters are delivered at one SDR stop and two letters are delivered at each of the two MDR delivery points and each of the two BAM delivery points.

The number of actual stops in the first scenario is five. The number of actual stops in the second scenario is three. There are five actual deliveries (consisting of five insertion motions) in both scenarios. Consider what, if anything, would cause load time to change from the first scenario to the second.

HYPOTHETICAL NO. 2

Suppose a system has four stops--two SDR stops, one MDR stop with two possible deliveries, and one BAM stop with one possible delivery. There are three scenarios to consider:

1) Under the first scenario, there are four bundles--regularly cased letters, DPS pieces (each a detached label), regularly cased flats, and saturation flats. There are four pieces in each bundle, for a total of 16 pieces. One piece of mail from each of the four bundles is delivered to each of the two SDR stops, one piece from each bundle is delivered to only one of the two MDR delivery points, and one piece from each bundle

is delivered to the BAM delivery point. Under this scenario, the act of bringing together pieces of a similar shape from separate bundles prior to inserting them into a receptacle would have to be performed eight times (two times at each of the four covered delivery points).

2) Under the second scenario, the same 16 pieces of mail are redistributed. Four DPS letters (detached labels) and four saturation flats are delivered to the first of two possible MDR delivery points, and four regular letters and four regular flats are delivered to the second of two possible MDR delivery points. This redistribution of the mail eliminates the need to bring together pieces of a similar shape from separate bundles prior to inserting them into receptacles.

3) Under the third scenario, volume is reduced from 16 to 8 pieces. One letter and one flat would be delivered to each of the two SDR delivery points, to one of the possible MDR delivery points, and to the BAM delivery point. This reduction in volume eliminates the need to bring together mail of similar shape from separate bundles prior to insertion.

Suppose that each act of bringing pieces of a similar shape together from separate bundles prior to insertion into a receptacle at a given delivery point takes one second. This element of preparation time would then take eight seconds under the first scenario, and zero seconds under the second and third scenarios. Consider whether time spent preparing to load mail in these scenarios is determined by delivered volume, delivery coverage, bundle characteristics, or stop coverage.